CLD

```
DDDDDDDD     CCCCCCC  LL         TTTTTTTTTT    AAAAAA   BBBBBBBB   LL          EEEEEEEEEE          11
DDDDDDDD     CCCCCCC  LL         TTTTTTTTTT    AAAAAA   BBBBBBBB   LL          EEEEEEEEEE          11
DD     DD   CC        LL             TT       AA    AA  BB      BB LL          EE               1111
DD     DD   CC        LL             TT       AA    AA  BB      BB LL          EE               1111
DD     DD   CC        LL             TT       AA    AA  BB      BB LL          EE                 11
DD     DD   CC        LL             TT       AA    AA  BB      BB LL          EE                 11
DD     DD   CC        LL             TT       AA    AA  BBBBBBBB   LL          EEEEEEEE            11
DD     DD   CC        LL             TT       AAAAAAAAA BB      BB LL          EE                 11
DD     DD   CC        LL             TT       AAAAAAAAA BB      BB LL          EE                 11
DD     DD   CC        LL             TT       AA    AA  BB      BB LL          EE                 11
DD     DD   CC        LL             TT       AA    AA  BB      BB LL          EE                 11
DDDDDDDD     CCCCCCC  LLLLLLLLLL     TT       AA    AA  BBBBBBBB   LLLLLLLLLL  EEEEEEEEEE      111111
DDDDDDDD     CCCCCCC  LLLLLLLLLL     TT       AA    AA  BBBBBBBB   LLLLLLLLLL  EEEEEEEEEE      111111

LL          IIIIII   SSSSSSSS
LL          IIIIII   SSSSSSSS
LL            II     SS
LL            II     SS
LL            II     SS
LL            II       SSSSSS
LL            II       SSSSSS
LL            II           SS
LL            II           SS
LL            II           SS
LL            II           SS
LLLLLLLLLL  IIIIII   SSSSSSSS
LLLLLLLLLL  IIIIII   SSSSSSSS
```

```
 1  !
 2  ! Version:     'V04-000'
 3  !
 4  !     V03-003 DAS0002         David Solomon              27-Jan-1984
 5  !             Remove type declarations for /TYPE and /PROCESS (as they
 6  !             are not used). Add disallow clauses to make /BINARY, /BRIEF,
 7  !             /FULL, and /SUMMARY mutually exclusive. Don't allow /SORT with
 8  !             /SUMMARY. Require /SUMMARY with /REPORT.
 9  !
10  !     V03-002 DAS0001         David Solomon              25-May-1983
11  !             Remove TYPE=xxx from /TYPE, /PROCESS, and /SORT qualifiers,
12  !             because the syntax that ACC accepted in V3 is not accepted
13  !             by DCL in V4, given the existing keyword TYPE definitions.
14  !
15  !     V03-001 PCA1008         Paul C. Anagnostopoulos 25-Mar-1983
16  !             Fix the VALUE clauses so that there are commas between
17  !             the subclauses.  The new CLD requires them.
18  !
19  define      type        ACNT_REPORT_KEYWORDS
20      keyword             BUFFERED_IO
21      keyword             DIRECT_IO
22      keyword             ELAPSED
23      keyword             EXECUTION
24      keyword             FAULTS
25      keyword             GETS
26      keyword             PAGE_FILE
27      keyword             PAGE_READS
28      keyword             PAGES
29      keyword             PROCESSOR
30      keyword             QIOS
31      keyword             RECORDS                  default
32      keyword             VOLUMES
33      keyword             WORKING_SET
34
35  define      type        ACNT_SUMMARY_KEYWORDS
36      keyword             ACCOUNT
37      keyword             DATE
38      keyword             DAY
39      keyword             HOUR
40      keyword             IMAGE
41      keyword             JOB
42      keyword             MONTH
43      keyword             NODE
44      keyword             PROCESS
45      keyword             QUEUE
46      keyword             TERMINAL
47      keyword             TYPE
48      keyword             UIC
49      keyword             USER          default
50      keyword             WEEKDAY
51      keyword             YEAR
52  !
```

```
53  define      verb       ACC      ACCOUNTING
54        image
55        parameter  P1      label   = INPUT
56                           value   (list,type=$infile,default=SYS$MANAGER:.DAT;)
```

```
 57     !
 58     !  Accounting record output qualifers
 59     !
 60            qualifier       BINARY
 61            qualifier       BRIEF
 62            qualifier       FULL
 63            qualifier       LOG
 64            qualifier       OUTPUT  default
 65                            value   (type=$outfile,default=SYS$OUTPUT)
 66            qualifier       REPORT  default
 67                            value   (type=ACNT_REPORT_KEYWORDS,list)
 68            qualifier       REJECTED
 69                            value   (required,type=$outfile)
 70            qualifier       SUMMARY value   (type=ACNT_SUMMARY_KEYWORDS,list)
 71            qualifier       TITLE   value   (required)
 72     !
 73     !  Accounting record selection qualifiers
 74     !
 75            qualifier       ACCOUNT value   (required,list)
 76            qualifier       ADDRESS value   (required,list)
 77            qualifier       BEFORE  value   (default=TODAY,type=$datetime)
 78            qualifier       ENTRY   value   (required,list)
 79            qualifier       IDENT   value   (required,list)
 80            qualifier       IMAGE   value   (required,list)
 81            qualifier       JOB     value   (required,list)
 82            qualifier       NODE    value   (required,list)
 83            qualifier       OWNER   value   (required,list)
 84            qualifier       PRIORITY value  (required,list)
 85            qualifier       PROCESS value   (required,list)
 86            qualifier       QUEUE   value   (required,list)
 87            qualifier       REMOTE_ID value (required,list)
 88            qualifier       SINCE   value   (default=TODAY,type=$datetime)
 89            qualifier       STATUS  value   (required,list)
 90            qualifier       TERMINAL value  (required,list)
 91            qualifier       TYPE    value   (required,list)
 92            qualifier       UIC     value   (required,list,type=$uic)
 93            qualifier       USER    value   (required,list)
 94     !
 95     !  Accounting record sort qualifiers
 96     !
 97            qualifier       SORT    value   (default=USER,list)
 98
 99            disallow        any2( SUMMARY, SORT )
100            disallow        any2( BRIEF, FULL, BINARY, SUMMARY )
101            disallow        not SUMMARY and REPORT
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
  1 ! Version:    'V04-000'
  2 !
  3 !
  4 !    V03-022 DGB0066         Donald G. Blair          03-Jul-1984
  5 !            Allow negation of all qualifiers for ANALYZE/IMAGE and
  6 !            ANALYZE/OBJECT and ANALYZE/RMS_FILE
  7 !
  8 !    V03-021 EAD0147         Elliott A. Drayton       12-Apr-1984
  9 !            Change file default for ANALYZE/ERROR_LOG.
 10 !
 11 !    V03-020 SAR0244         Sharon A. Reynolds       4-Apr-1984
 12 !            Removed the negatable clause from /sid_selection
 13 !            for ANALYZE/ERROR_LOG.
 14 !
 15 !    V03-019 EAD0121         Elliott A. Drayton          24-Mar-1984
 16 !            Removed qualifier UNKNOWN.
 17 !
 18 !    V03-018 EAD0106         Elliott A. Drayton       28-Feb-1984
 19 !            Added LIST keyword for parameter(list of input file names)
 20 !
 21 !    V03-017 WMC0007         Wayne Cardoza            27-Feb-1984
 22 !            Remove checkpoint and journaling related stuff.
 23 !
 24 !    V03-016 JMG0011         Joel M. Gringorten       6-Feb-1984
 25 !            Added STATISTICS qualifier for ANALYZE/SUMMARY.
 26 !
 27 !    V03-015 SAR0185         Sharon A. Reynolds       17-Jan-1984
 28 !            Added HISTOGRAM keyword for ANALYZE/ERROR/SUMMARY.
 29 !
 30 !    V03-014 SAR0123         Sharon A. Reynolds       23-Aug-1983
 31 !            Added a file spec value for the /binary qualifier
 32 !            for ANALYZE/ERROR_LOG.
 33 !
 34 !    V03-013 LJA0084         Laurie J. Anderson       25-Jul-1983
 35 !            Fix CLD defaults for ANALYZE/AUDIT
 36 !
 37 !    V03-012 WMC0006         Wayne Cardoza            24-Jul-1983
 38 !            Add ANALYZE/PROC/OUTPUT.
 39 !
 40 !    V03-011 LJA0076         Laurie J. Anderson       21-Jun-1983
 41 !            Add support for new ANALYZE/AUDIT utility
 42 !
 43 !    V03-010 SAR0019         Sharon A. Reynolds,      27-Apr-1983
 44 !            Added keyword support for /summary. Removed the negatable
 45 !            clause for /brief, /register_dump, and /unknown qualifiers.
 46 !            (analyze/error).
 47 !
 48 !    V03-009 WMC0005         Wayne Cardoza   20-Apr-1983
 49 !            Add ANALYZE/PROCESS_DUMP
 50 !            THIS AND THE TWO PRECEDING UPDATES WERE ACC!DENTALLY DELETED
 51 !            SOMEHOW.
 52 !
 53 !    V03-008 PCA1012         Paul C. Anagnostopoulos 14-Apr-1983
 54 !            Allow /NOOUTPUT on the ANALYZE/RMS command.
 55 !
 56 !    V03-007 WMC0004         Wayne Cardoza   04-Apr-1983
```

```
 57    !              More /CHECKPOINT qualifiers.
 58    !
 59    !      V03-006 PCA0070         Paul C. Anagnostopoulos 31-Mar-1983
 60    !              Remove the PROMPT clauses from the qualifiers added in
 61    !              EAD0070.
 62    !
 63    !      V03-005 EAD0070         Elliott A. Drayton       29-Mar-1983
 64    !              Add support for ana/error.
 65    !
 66    !      V03-004 WMC0003         Wayne Cardoza    25-Mar-1983
 67    !              Add /OUTPUT for checkpoint
 68    !
 69    !      V03-003 WMC0002         Wayne Cardoza    10-Feb-1983
 70    !              New checkpoint qualifiers
 71    !
 72    !      V03-002 MTR0001         Mike Rhodes      3-Jan-1983
 73    !              Add list to PATTERN keyword (ANALYZE/MEDIA/EXERCISE).
 74    !
 75    !      V03-001 WMC0001         Wayne Cardoza    28-Dec-1982
 76    !              Add /CHECKPOINT qualifiers
 77    !
 78    define syntax analyze_crash_dump
 79        image sda
 80        parameter p1,label=dump_file,prompt="Dump File",value(required,type=$infile)
 81        qualifier CRASH_DUMP,default
 82        qualifier SYSTEM
 83        qualifier SYMBOLS,value(required,type=$infile)
 84
 85    define syntax analyze_disk_structure
 86        image verify
 87        parameter p1,label=device,prompt="Device",value(required,type=$device)
 88        qualifier CONFIRM
 89        qualifier DISK_STRUCTURE,default
 90        qualifier LIST,value(type=$outfile)
 91        qualifier READ_CHECK
 92        qualifier REPAIR
 93        qualifier USAGE,value(type=$outfile)
 94
 95    define type SUMMARY_TYPE_KEYWORDS
 96        keyword DEVICE
 97        keyword ENTRY
 98        keyword HISTOGRAM
 99        keyword MEMORY
100        keyword VOLUME
101
102    define type ENTRY_KEYWORDS
103        keyword END,            value(type=$number)
104        keyword START,          value(type=$number)
105
106    define syntax analyze_error_log
107        image SYS$SYSTEM:ERF.EXE
108        parameter P1, label=file_specs,
109                    value(list,type=$infile,default="SYS$ERRORLOG:ERRLOG.SYS")
110        qualifier BEFORE,               value(type=$datetime),nonnegatable
111        qualifier BINARY,               value(type=$outfile)
112        qualifier BRIEF,                nonnegatable
```

```
113         qualifier ENTRY,               value(required,
114                                           type=ENTRY_KEYWORDS,list),
115                                           nonnegatable
116         qualifier EXCLUDE,             value(required,list),
117                                           nonnegatable
118         qualifier FULL,                negatable
119         qualifier INCLUDE,             value(required,list),
120                                           nonnegatable
121         qualifier LOG,                 negatable
122         qualifier OUTPUT,              default,value(default=SYS$OUTPUT),
123                                           nonnegatable
124         qualifier PAGE,                negatable
125         qualifier REJECTED,            value(type=$outfile)
126         qualifier REGISTER_DUMP,       nonnegatable
127         qualifier SID_REGISTER,        value(required,
128                                           type=$number),nonnegatable
129         qualifier SINCE,               value(default=today,type=$datetime),
130                                           nonnegatable
131         qualifier STATISTICS,          nonnegatable
132         qualifier SUMMARY,             value(type=SUMMARY_TYPE_KEYWORDS,list),
133                                           nonnegatable
134
135 define syntax analyze_image
136         image analyzobj
137         parameter p1,label=file_specs,prompt="File(s)",value(required,list,type=$infile)
138         qualifier FIXUP_SECTION,placement=positional
139         qualifier GST,placement=positional
140         qualifier HEADER,placement=positional
141         qualifier OUTPUT,default,value(default="SYS$OUTPUT",type=$outfile)
142         qualifier IMAGE,default
143         qualifier INTERACTIVE
144         qualifier PATCH_TEXT,placement=positional
145
146 define syntax analyze_rms_file
147         image analyzrms
148         parameter p1,label=file_specs,prompt="File(s)",value(required,list,type=$infile)
149         qualifier CHECK
150         qualifier FDL
151         qualifier INTERACTIVE
152         qualifier STATISTICS
153         qualifier SUMMARY
154         qualifier OUTPUT,default,value(type=$outfile)
155
156 define syntax analyze_system
157         image sda
158         noparameters
159
160 !
161 ! Keyword definitions for ANALYZE/MEDIA
162 !
163 define type exer_keywords
164         keyword FULL
165         keyword KEEP, negatable
166         keyword PATTERN, value (list)
167
168 define type show_keywords
```

```
169              keyword BEFORE, negatable
170              keyword AFTER, negatable
171
172    define syntax analyze_media
173              image analyzbad
174              parameter p1, label=device, prompt="Device", value (required, type=$device)
175
176              qualifier BAD_BLOCKS, nonnegatable, value (list)
177              qualifier EXERCISE, value (list, type=exer_keywords)
178              qualifier LOG
179              qualifier OUTPUT, value (default="SYS$OUTPUT", type=$outfile)
180              qualifier RETRY
181              qualifier SHOW, nonnegatable, value (list, type=show_keywords)
182
183    !**JNL** define syntax analyze_checkpoint
184    !**JNL**          image    chkanal
185    !**JNL**          parameter p1,prompt="File",value(required,type=$infile),label=chkpnt
186    !**JNL**          qualifier full
187    !**JNL**          qualifier quota
188    !**JNL**          qualifier interactive
189    !**JNL**          qualifier database
190    !**JNL**          qualifier output,value(default="SYS$OUTPUT", type=$outfile)
191    !**JNL**          qualifier record,value(required)
192    !**JNL**          qualifier create,value(type=$outfile)
193
194    define syntax analyze_process_dump
195              image analimdmp
196              parameter p1,prompt="File",value(required,type=$infile)
197              qualifier image,          value(type=$outfile)
198              qualifier noimage
199              qualifier interactive
200              qualifier full
201              qualifier miscellaneous
202              qualifier relocation
203              qualifier output,value(default="SYS$OUTPUT", type=$outfile)
204    !
205    !  Keyword definitions for ANALYZE/AUDIT
206    !
207    !**JNL** define type FILE_ACCESS_KEYWORDS
208    !**JNL**          keyword BYPASS,           value( list, type=ACCESS_TYPE_KEYWORDS )
209    !**JNL**          keyword FAILURE,          value( list, type=ACCESS_TYPE_KEYWORDS )
210    !**JNL**          keyword GRPPRV,           value( list, type=ACCESS_TYPE_KEYWORDS )
211    !**JNL**          keyword READALL,          value( list, type=ACCESS_TYPE_KEYWORDS )
212    !**JNL**          keyword SUCCESS,          value( list, type=ACCESS_TYPE_KEYWORDS )
213    !**JNL**          keyword SYSPRV,           value( list, type=ACCESS_TYPE_KEYWORDS )
214    !**JNL**          keyword RECORD_MANAGEMENT, value( list, type=RMS_SERVICES )
215
216    !**JNL** define type ACCESS_TYPE_KEYWORDS
217    !**JNL**          keyword READ
218    !**JNL**          keyword WRITE
219    !**JNL**          keyword EXECUTE
220    !**JNL**          keyword DELETE
221    !**JNL**          keyword OWNER
222
223    !**JNL** define type RMS_SERVICES
224    !**JNL**          keyword CLOSE
```

```
225  !**JNL**        keyword CREATE
226  !**JNL**        keyword DELETE
227  !**JNL**        keyword EXTEND
228  !**JNL**        keyword FIND
229  !**JNL**        keyword GET
230  !**JNL**        keyword OPEN
231  !**JNL**        keyword PUT
232  !**JNL**        keyword READ
233  !**JNL**        keyword TRUNCATE
234  !**JNL**        keyword UPDATE
235  !**JNL**        keyword WRITE
236
237  !**JNL** define type LOGIN_KEYWORDS
238  !**JNL**        keyword BATCH
239  !**JNL**        keyword DIALUP
240  !**JNL**        keyword FAILURES
241  !**JNL**        keyword LOCAL
242  !**JNL**        keyword NETWORK
243  !**JNL**        keyword PROCESS
244
245  !**JNL** define type LOGOUT_KEYWORDS
246  !**JNL**        keyword BATCH
247  !**JNL**        keyword DIALUP
248  !**JNL**        keyword LOCAL
249  !**JNL**        keyword NETWORK
250  !**JNL**        keyword PROCESS
251
252  !**JNL** define type JOURNAL_TYPE_KEYWORDS
253  !**JNL**        keyword AT              default
254  !**JNL**        keyword AI
255  !**JNL**        keyword BI
256  !**JNL**        keyword RU
257
258  !**JNL** define syntax analyze_audit
259  !**JNL**        image audit
260  !**JNL**        parameter p1,label=file_spec,value(list,type=$infile)
261  !**JNL**        qualifier ACL
262  !**JNL**        qualifier AUTHORIZATION
263  !**JNL**        qualifier BACKWARD,            nonnegatable
264  !**JNL**        qualifier BEFORE,              nonnegatable,value(default=TODAY,type=$datetime)
265  !**JNL**        qualifier FILE_ACCESS,         value(type=FILE_ACCESS_KEYWORDS,list)
266  !**JNL**        qualifier FORWARD,             nonnegatable,default
267  !**JNL**        qualifier FULL
268  !**JNL**        qualifier IDENTIFICATION,      value(list,type=$number,required)
269  !**JNL**        qualifier JOURNAL,             nonnegatable,value(list,type=$infile)
270  !**JNL**        qualifier LOGIN,               value(list,type=LOGIN_KEYWORDS)
271  !**JNL**        qualifier LOGOUT,              value(list,type=LOGOUT_KEYWORDS)
272  !**JNL**        qualifier MAILBOX_IO,          value(list,type=$device)
273  !**JNL**        qualifier MOUNT
274  !**JNL**        qualifier OUTPUT               nonnegatable,value(type=$outfile,default=sys$output:),default
275  !**JNL**        qualifier SETPRV
276  !**JNL**        qualifier SINCE,               nonnegatable,value(default=TODAY,type=$datetime)
277  !**JNL**        qualifier TERMINAL_IO,         value(list,type=$device)
278  !**JNL**        qualifier TYPE,                value(required,type=JOURNAL_TYPE_KEYWORDS)
279  !**JNL**        qualifier UIC,                 value(list,type=$uic)
280
```

```
  281    !**JNL** disallow (BACKWARD and FORWARD)
  282    !
  283    !  ANALYZE
  284    !
  285    define verb ANALYZE
  286         image analyzobj
  287         parameter p1,label=file_specs,prompt="File(s)",value(required,list,type=$infile)
  288
  289    !**JNL**        qualifier AUDIT,nonnegatable,syntax=analyze_audit
  290         qualifier CRASH_DUMP,nonnegatable,syntax=analyze_crash_dump
  291         qualifier DISK_STRUCTURE,nonnegatable,syntax=analyze_disk_structure
  292         qualifier ERROR_LOG,nonnegatable,syntax=analyze_error_log
  293         qualifier IMAGE,nonnegatable,syntax=analyze_image
  294         qualifier MEDIA,nonnegatable,syntax=analyze_media
  295         qualifier OBJECT,default,nonnegatable
  296         qualifier RMS_FILE,nonnegatable,syntax=analyze_rms_file
  297         qualifier SYSTEM,nonnegatable,syntax=analyze_system
  298    !**JNL**        qualifier CHECKPOINT,nonnegatable,syntax=analyze_checkpoint
  299         qualifier PROCESS_DUMP,nonnegatable,syntax=analyze_process_dump
  300
  301         qualifier DBG,placement=positional
  302         qualifier EOM,placement=positional
  303         qualifier GSD,placement=positional
  304         qualifier INCLUDE,placement=local,value(default="*",list)
  305         qualifier INTERACTIVE
  306         qualifier LNK,placement=positional
  307         qualifier MHD,placement=positional
  308         qualifier OUTPUT,default,value(default="SYS$OUTPUT",type=$outfile)
  309         qualifier TBT,placement=positional
  310         qualifier TIR,placement=positional
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1    module BACKUPCMD
 2  !
 3  !  Version:    'V04-000'
 4  !
 5  !     V03-005 LY0515          Larry Yetto              24-JUL-1984 11:08
 6  !             Do not allow both /RECORD and /DELETE on the same line
 7  !
 8  !     V03-004 JEP0004         J. Eric Pollack,         21-Aug-1983
 9  !             Revise /ENCRYPT syntax
10  !
11  !     V03-003 JEP0003         J. Eric Pollack,         23-Apr-1983  10:53
12  !             Add support for encrypted savesets.
13  !
14  !     V03-002 MLJ0108         Martin L. Jack           13-Apr-1983
15  !             Remove $DATETIME from BEFORE and SINCE.
16  !
17  !     V03-001 ACG0314         Andrew C. Goldstein      10-Feb-1983  22:24
18  !             Make /NOREWIND and /NOINITIALIZE default for save sets
19  !
20    define type encryp_val
21        keyword NAME                value(type=$outlog)
22        keyword ALGORITHM           value(type=$outlog,default="DESCBC")
23        keyword VALUE               value(list)
24    define syntax BACKUP_LIST
25        parameter P1
26          label=INPUTS
27          prompt="From"
28          value(list,type=$infile)
29        parameter P2
30          label=OUTPUTS
31          prompt="To"
32          value(list,type=$outfile)
33    define verb BACKUP
34        parameter P1
35          label=INPUTS
36          prompt="From"
37          value(required,list,type=$infile)
38        parameter P2
39          label=OUTPUTS
40          prompt="To"
41          value(required,list,type=$outfile)
42        qualifier ANALYZE
43        qualifier BACKUP
44        qualifier BEFORE
45          value(required)
46        qualifier BLOCK_SIZE
47          value(required)
48        qualifier BRIEF
49        qualifier BUFFER_COUNT
50          value(required)
51        qualifier COMMENT
52          value(required)
53        qualifier COMPARE
54        qualifier CONFIRM
55        qualifier CRC
56          default
```

```
 57        qualifier CREATED
 58        qualifier DELETE
 59        qualifier DENSITY
 60          value(required)
 61        qualifier ENCRYPT
 62          value(list,type=encryp_val)
 63          disallow ENCRYPT.NAME and ENCRYPT.VALUE
 64        qualifier EXCLUDE
 65          value(required,list,type=$infile)
 66        qualifier EXPIRED
 67        qualifier FAST
 68        qualifier FULL
 69        qualifier GROUP_SIZE
 70          value(required)
 71        qualifier IGNORE
 72          value(required,list,type=$infile)
 73        qualifier IMAGE
 74        qualifier INCREMENTAL
 75        qualifier INITIALIZE
 76        qualifier INTERCHANGE
 77        qualifier JOURNAL
 78          value(type=$outfile)
 79        qualifier LABEL
 80          value(required,list)
 81        qualifier LIST
 82          value
 83          syntax=BACKUP_LIST
 84        qualifier LOG
 85        qualifier MODIFIED
 86        qualifier NEW_VERSION
 87        qualifier OVERLAY
 88        qualifier OWNER_UIC
 89          placement=local
 90          value(type=$uic)
 91        qualifier PHYSICAL
 92        qualifier PROTECTION
 93          placement=positional
 94          value(list)
 95        qualifier RECORD
 96        qualifier REPLACE
 97        qualifier REWIND
 98        qualifier SAVE_SET
 99          placement=local
100        qualifier SELECT
101          value(required,list,type=$infile)
102        qualifier SINCE
103          value(required)
104        qualifier TRUNCATE
105        qualifier VERIFY
106        qualifier VOLUME
107          value(required)
108        disallow  DELETE and RECORD
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
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 2  |  Version:    'V04-000'
 3  |
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23  |  *                                                                         *
24  |  *                                                                         *
25  |  ***************************************************************************
26  |
27  DEFINE VERB CHECKSUM
28          PARAMETER P1,LABEL=input,PROMPT="File",VALUE(REQUIRED)
29          QUALIFIER output, DEFAULT, VALUE(DEFAULT=SYS$OUTPUT)
30          QUALIFIER image
31          QUALIFIER file
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !
 2  !  Version:    'V04-000'
 3  !
 4
 5  define syntax reclaim
 6
 7  image reclaim
 8
 9  parameter p1,label=file_name,prompt="File",value(required,type=$infile)
10  qualifier statistics
11
12
13  define verb convert
14
15  image convert
16
17  parameter p1,label=infile,prompt="Input",value(required,list,type=$infile)
18  parameter p2,label=outfile,prompt="Output",value(required,type=$outfile)
19
20  qualifier append
21  qualifier create,default
22  qualifier fdl,label=fdl,value(required,type=$infile),nonnegatable
23  qualifier exceptions_file,label=exception,value(default="SYS$OUTPUT",type=$infile),nonnegatable
24  qualifier exit
25  qualifier fast_load,default
26  qualifier fill_buckets
27  qualifier fixed_control
28  qualifier key,value(required,type=$number),nonnegatable
29  qualifier merge,nonnegatable
30  qualifier pad,value(default="%D0")
31  qualifier prologue,value(required,type=$number),nonnegatable
32  qualifier read_check
33  qualifier share
34  qualifier sort,default
35  qualifier statistics
36  qualifier truncate
37  qualifier work_files,value(required,type=$number),nonnegatable
38  qualifier write_check
39  qualifier reclaim,syntax=reclaim,nonnegatable
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1     !
 2     !  Version:    'V04-000'
 3
 4
 5     define type protection
 6             keyword system,value
 7             keyword group,value
 8             keyword owner,value
 9             keyword world,value
10
11     define verb append
12             image copy
13             parameter p1, label=infile, prompt="From",
14                             value(required,list,impcat,type=$infile)
15             parameter p2, label=outfile, prompt="To",
16                             value(required,type=$outfile)
17             qualifier allocation,   value(required), placement=positional
18             qualifier contiguous,   placement=positional
19             qualifier extension,    value(required), placement=positional
20             qualifier file_maximum, value(required,list), placement=positional
21             qualifier new_version,
22             qualifier protection,   value(required,list,type=protection),
23                             placement=positional
24             qualifier read_check,   placement=positional
25             qualifier log
26             qualifier write_check,  placement=positional
27             qualifier confirm
28             qualifier exclude,value(list)
29             qualifier before,value(default=today)
30             qualifier since,value(default=today)
31             qualifier created
32             qualifier modified
33             qualifier expired
34             qualifier backup
35             qualifier by_owner,value(type=$uic)
36
37     define syntax copy_using_pip
38             image backtrans
39
40     define verb copy
41             image copy
42             parameter p1, label=infile, prompt="From",
43                             value(required,list,impcat,type=$infile)
44             parameter p2,label=outfile, prompt="To",
45                             value(required,type=$outfile)
46             qualifier allocation,   value(required,list), placement=positional
47             qualifier concatenate,  default
48             qualifier contiguous,   placement=positional
49             qualifier extension,    value(required), placement=positional
50             qualifier file_maximum, value(required), placement=positional
51             qualifier overlay,      placement=positional
52             qualifier protection,   value(required, list, type=protection),
53                             placement=positional
54             qualifier read_check,   placement=positional
55             qualifier replace,      placement=positional
56             qualifier log
```

```
57          qualifier volume,       value(required)
58          qualifier write_check,  placement=positional
59          qualifier truncate,     placement=positional
60          qualifier confirm
61          qualifier exclude,value(list)
62          qualifier before,value(default=today)
63          qualifier since,value(default=today)
64          qualifier created
65          qualifier modified
66          qualifier expired
67          qualifier backup
68          qualifier by_owner,value(type=$uic)
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1
 2      Version:    'V04-000'
 3
 4          V03-005 HWS0004        Harold Schultz         07-Feb-1984
 5                  Changed syntax of /LOGICAL_NAME_TABLE qualifier to
 6                  /NAME_TABLE. Also added additional protection qualifier
 7                  when creating a logical name table of the form:
 8                  CREATE/NAME_TABLE/PROTECTION=(SY:RWED,OW:RWED,...)
 9                  Add /LOG qualifier to logical name table creation table.
10
11          V03-004 PCG0002        Peter George           31-May-1983
12                  Add PREFIX to CREATE/LOGICAL_NAME_TABLE.
13
14          V03-003 PCG0001        Peter George           27-May-1983
15                  Add CREATE/LOGICAL_NAME_TABLE.
16
17          V03-002 MAJ0001        Melanie Johnson        25-May-1983
18                  These definitions are being added to MCR with the exception of
19                  CREATE/FDL, which is being flagged for MCR to ignore it.
20
21
22          V03-001 SHZ0001        Stephen H. Zalewski    16-May-1983
23                  Modified CREATE qualifiers.
24
25
26      define type protection
27          keyword system,value
28          keyword group,value
29          keyword owner,value
30          keyword world,value
31
32      define syntax fdl
33          image createfdl
34          parameter p1,label=file_name,prompt=" ",value(type=$outfile)
35
36      define type attribute_keywords
37          keyword confine
38          keyword no_alias
39          keyword supersede
40
41      define syntax name_table
42          cliroutine cretable
43          prefix cli$k_cret_
44          parameter p1,prompt="Table name",value(required)
45          qualifier user_mode
46          qualifier supervisor_mode
47          qualifier executive_mode
48          qualifier attributes,value(required,type=attribute_keywords,list)
49          qualifier parent_table,value(required)
50          qualifier quota,value(required,type=$number)
51          qualifier protection,   value(required,list,type=protection)
52          qualifier log
53      define verb create
54          image create
55          parameter p1,prompt="File",value(required,list,impcat,type=$outfile), label=output
56          qualifier directory
```

```
57          qualifier owner_uic,    value(type=$uic,required)
58          qualifier protection,   value(required,(ist,type=protection)
59          qualifier log
60          qualifier version_limit,value(required)
61          qualifier volume,       value(required)
62          qualifier fdl,label=fdl_file,value(type=$infile,required),cliflags(mcrignore),syntax=fdl
63          qualifier name_table,syntax=name_table
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1
 2    Version:    'V04-000'
 3
 4        V03-030 HWS0068        Harold Schultz        24-May-1984
 5                Change WRITE/SYMBOL second parameter type to
 6                $QUOTED_STRING.
 7
 8        V03-029 HWS0040        Harold Schultz        26-Mar-1984
 9                Change ALLOCATE syntax to ALLOCATE /GENERIC DEV
10                Add READ/TIME_OUT=n.
11                Add CLOSE/LOG.
12
13        V03-028 PCG0016        Peter George          23-Mar-1984
14                Add /JOB qualifier to logical name commands.
15
16        V03-027 HWS0025        Harold Schultz        09-Mar-1984
17                Add /SYMBOL to WRITE command
18
19        V03-026 PCG0015        Peter George          01-Dec-1983
20                Add DEFINE/KEY/ERASE.
21
22        V03-025 MLJ0025        Martin L. Jack        23-Aug-1983
23                Add DEFINE/FORM/PAGE_SETUP.
24
25        V03-024 MLJ0024        Martin L. Jack        29-Jul-1983
26                Enhance DEFINE/FORM.
27
28        V03-023 PCG0014        Peter George          27-Jul-1983
29                Remove privilege list.
30                Remove X-form of logical name commands.
31
32        V03-022 PCG0013        Peter George          21-Jun-1983
33                Make second WRITE parameter $EXPRESSION.
34
35        V03-021 PCG0012        Peter George          21-Jun-1983
36                Add /CONTINUE to CONNECT and DISCONNECT.
37
38        V03-020 PCG0011        Peter George          21-Jun-1983
39                Add CONNECT and DISCONNECT.
40
41        V03-019 PCG0010        Peter George          31-May-1983
42                Add PREFIX to XDEFINE and XALLOCATE.
43
44        V03-018 MLJ0018        Martin L. Jack        27-May-1983
45                Add DEFINE/FORM and DEFINE/CHARACTERISTIC.
46
47        V03-017 PCG0008        Peter George          27-May-1983
48                Add SECURITY priv.
49                Add XDEFINE, XASSIGN, XALLOCATE, XDALLOCATE, XDEASSIGN.
50
51        V03-016 PCG0007        Peter George          30-Apr-1983
52                Add /LOG to ALLOCATE, ASSIGN, DEFINE.
53
54        V03-015 MLJ0015        Martin L. Jack        27-Apr-1983
55                Changes to STOP/QUEUE for new QUEMAN image.
56
```

```
 57  |      V03-014 PRB0175          Paul Beck              27-APR-1983 15:50:39
 58  |              Add TMPJNL, PRMJNL privileges.
 59  |
 60  |      V03-013 PCG0006          Peter George           10-Apr-1983
 61  |              Modify RECALL, ALLOCATE.
 62  |              Create RUN.CLD.
 63  |
 64  |      V03-012 PCG0005          Peter George           28-Mar-1983
 65  |              Add DEFINE/KEY, RECALL.
 66  |
 67  |      V03-011 PCA1008          Paul C. Anagnostopoulos 25-Mar-1983
 68  |              Make all necessary changes for new CDU.
 69  |
 70  |      V03-010 WMC0010          Wayne Cardoza          07-Mar-1983
 71  |              New RUN/CHECK qualifier
 72  |
 73  |      V03-009 PCA1008          Paul C. Anagnostopoulos  4-Mar-1983
 74  |              Put back the PREFIX clause for the RUN verb.
 75  |
 76  |      V03-008 MLJ0008          Martin L. Jack         01-Mar-1983
 77  |              Changes for new QUEMAN image.
 78  |
 79  |      V03-007 PCA1008          Paul C. Anagnostopoulos 25-Feb-1983
 80  |              Clean up various things.
 81  |
 82  |      V03-006 PCG0004          Peter George           24-Feb-1983
 83  |              Specify NOSTAT for appropriate verbs.
 84  |
 85  |      V03-005 PCG0003          Peter George           05-Jan-1983
 86  |              Add READ/MATCH
 87  |
 88  |      V03-004 PCG0002          Peter George           15-Dec-1982
 89  |              Remove HELP
 90  |
 91  |      V03-003 PCG0001          Peter George           20-Aug-1982
 92  |              Add CANCEL
 93  |
 94  |      V03-002 WMC0001          Wayne Cardoza          11-Aug-1982
 95  |              Add RUN/CHECKPOINT, RUN/RESTART
 96  |
 97  |      V03-001 DWT0053          David Thiel            15-Jul-1982
 98  |              Allow negated privileges
 99  |              Add commands previously defined in DATABASE.MAR
100  
101  define verb allocate
102          cliroutine allocate
103          prefix cli$k_allo_
104          parameter p1,prompt="Device",value(required,list,type=$device)
105          parameter p2,prompt="Log name",value(type=$outlog)
106          qualifier generic
107          qualifier log
108  
109  define syntax merge_queue
110          image queman
111  
112  define type tran_attr
```

```
113           keyword concealed
114           keyword terminal
115
116   define type name_attr
117           keyword confine
118           keyword no_alias
119
120   define verb assign
121           cliroutine assign
122           parameter p1,prompt="Device",value(required,type=$infile,list)
123           parameter p2,prompt="Log name",value(required,type=$outlog)
124           qualifier system                              | Must be #1.
125           qualifier group                               | Must be #2.
126           qualifier job                                 | Must be #3.
127           qualifier process                             | Must be #4.
128           qualifier user_mode                           | Must be #5.
129           qualifier supervisor_mode                     | Must be #6.
130           qualifier executive_mode                      | Must be #7.
131           qualifier table,value(required)               | Must be #8.
132           qualifier log                                 | Must be #9.
133           qualifier name_attributes,                    | Must be #10.
134                   value(type=name_attr,list)
135           qualifier translation_attributes,             ! Must be #11.
136                   placement=positional,
137                   value(type=tran_attr,list)
138           qualifier queue,syntax=merge_queue
139           qualifier merge,syntax=merge_queue
140
141   define verb cancel
142           cliroutine cancel
143           parameter p1,label=p1,prompt="File",value(type=$process)
144           qualifier identification,value(required)
145
146   define verb close
147           prefix cli$k_clos_
148           cliroutine close
149           parameter p1,prompt="Log name",value(required,type=$inlog)
150           qualifier end_of_file,   value(required) ! /EOf and /ERROR must be
151           qualifier error,         value(required) ! first for all file commands.
152           qualifier log
153
154   define verb connect
155           prefix cli$k_conn
156           cliroutine connect
157           parameter p1,prompt="Terminal name",value(required,type=$device)
158           qualifier continue
159           qualifier logout
160           disallow (continue and logout)
161
162   define verb continue
163           synonym c
164           cliroutine continue
165           cliflags(abbreviate,nostatus)
166
167   define syntax deallocate_all_devices
168           noparameters
```

```
169
170     define verb deallocate
171         cliroutine deallocat
172         parameter p1,prompt="Device",value(required,type=$device)
173         qualifier all,syntax=deallocate_all_devices
174
175     define syntax deassign_all_names
176         noparameters
177
178     define syntax deassign_queue
179         image queman
180
181     define verb deassign
182         cliroutine deassign
183         parameter p1,prompt="Log name",value(required,type=$inlog)
184         qualifier system                                    ! Must be #1.
185         qualifier group                                     ! Must be #2.
186         qualifier job                                       ! Must be #3.
187         qualifier process                                   ! Must be #4.
188         qualifier user_mode                                 ! Must be #5.
189         qualifier supervisor_mode                           ! Must be #6.
190         qualifier executive_mode                            ! Must be #7.
191         qualifier table,value(required)                     ! Must be #8.
192         qualifier all,syntax=deassign_all_names             ! Must be #9.
193         qualifier queue,syntax=deassign_queue
194
195     define verb debug
196         cliroutine debug
197
198     define verb deck
199         cliroutine deck
200         cliflags(nostatus)
201         qualifier dollars,      value
202
203     define syntax define_characteristic
204         image queman
205         parameter p1,prompt="Char name",value(required)
206         parameter p2,prompt="Char number",value(required)
207
208     define type form_margin
209         keyword bottom,         value(required)
210         keyword left,           value(required)
211         keyword right,          value(required)
212         keyword top,            value(required)
213
214     define syntax define_form
215         image queman
216         parameter p1,prompt="Form name",value(required)
217         parameter p2,prompt="Form number",value(required)
218         qualifier characteristic
219         qualifier description,  nonnegatable,value(required)
220         qualifier length,       nonnegatable,value(required)
221         qualifier margin,       nonnegatable,value(required,list,type=form_margin)
222         qualifier page_setup,   value(required,list)
223         qualifier setup,        value(required,list)
224         qualifier sheet_feed
```

```
225         qualifier stock,          nonnegatable,value(required)
226         qualifier truncate
227         qualifier width,          nonnegatable,value(required)
228         qualifier wrap
229
230 define syntax define_key
231         prefix cli$k_defk_
232         cliroutine defkey
233         parameter p1,prompt="Key name",value(required)
234         parameter p2,prompt="Equivalence name",value(required)
235         qualifier echo
236         qualifier terminate
237         qualifier lock_state
238         qualifier if_state,value(required,list)
239         qualifier set_state,value(required)
240         qualifier log
241         qualifier erase
242         disallow (not lock_state and terminate and set_state)
243         disallow (lock_state and not set_state)
244
245 define verb define
246         cliroutine define
247         prefix cli$k_defi_
248         parameter p1,prompt="Log name",value(required,type=$outlog)
249         parameter p2,prompt="Equ name",value(required,type=$infile,list)
250         qualifier system                              ! Must be #1.
251         qualifier group                               ! Must be #2.
252         qualifier job                                 ! Must be #3.
253         qualifier process                             ! Must be #4.
254         qualifier user_mode                           ! Must be #5.
255         qualifier supervisor_mode                     ! Must be #6.
256         qualifier executive_mode                      ! Must be #7.
257         qualifier table,value(required)               ! Must be #8.
258         qualifier log                                 ! Must be #9.
259         qualifier name_attributes,                    ! Must be #10.
260             value(type=name_attr,list)
261         qualifier translation_attributes,             ! Must be #11.
262             placement=positional,
263             value(type=tran_attr,list)
264         qualifier key,syntax=define_key
265         qualifier characteristic,syntax=define_characteristic
266         qualifier form,syntax=define_form
267
268 ! DEPOSIT uses the same qualifiers as EXAMINE, and they must appear in the
269 ! same order.
270
271 define verb deposit
272         cliroutine deposit
273         cliflags(immediate,nostatus)
274         qualifier ascii,nonnegatable
275         qualifier byte,nonnegatable
276         qualifier decimal,nonnegatable
277         qualifier hexadecimal,nonnegatable
278         qualifier long,nonnegatable
279         qualifier octal,nonnegatable
280         qualifier word,nonnegatable
```

```
281
282    define verb disconnect
283            cliroutine disconnect
284            qualifier continue
285
286    define verb dsm
287            image   dsm
288            cliflags(foreign)
289
290    define verb eod
291            cliroutine eod
292            cliflags(immediate,nostatus)
293
294    define verb eoj
295            cliroutine eoj
296
297    define verb examine
298            cliroutine examine
299            prefix cli$k_exam_
300            cliflags(immediate,nostatus)
301            qualifier ascii,nonnegatable
302            qualifier byte,nonnegatable
303            qualifier decimal,nonnegatable
304            qualifier hexadecimal,nonnegatable
305            qualifier long,nonnegatable
306            qualifier octal,nonnegatable
307            qualifier word,nonnegatable
308
309    define verb exit
310            cliroutine exit
311            cliflags(immediate)
312
313    define verb goto
314            cliroutine goto
315            cliflags(nostatus)
316            parameter p1,prompt="Label",value(required)
317
318    define verb if
319            cliroutine if
320            cliflags(immediate,nostatus)
321
322    define verb inquire
323            cliroutine inquire
324            prefix cli$k_inqu_
325            cliflags(immediate)
326            qualifier        global,nonnegatable
327            qualifier        local,nonnegatable
328            qualifier        punctuation
329
330    define verb logout
331            cliroutine logout
332            qualifier brief
333            qualifier full
334            qualifier hangup
335
336    define verb mcr
```

```
337             cliroutine mcr
338             cliflags(foreign)
339
340     define verb on
341             cliroutine on
342             cliflags(immediate)
343
344     define type share_options
345             keyword read
346             keyword write
347
348     define verb open
349             cliroutine open
350             prefix cli$k_open_
351             parameter p1,prompt="Log name",value(required,type=$outlog)
352             parameter p2,prompt="File",value(required,type=$infile)
353             qualifier end_of_file,  value(required)  ! Make /EOF=1, /ERROR=2 for
354             qualifier error,        value(required)  ! all file commands
355             qualifier read
356             qualifier write
357             qualifier share,        value(type=share_options)
358             qualifier append
359             disallow (write and append)
360
361     define type match_keys
362             keyword eq
363             keyword ge
364             keyword gt
365
366     define verb read
367             cliroutine read
368             prefix cli$k_read_
369             parameter p1,prompt="Log name",value(required,type=$inlog)
370             parameter p2,prompt="Symbol",value(required,type=$outfile)
371                         ! $outfile on p2 needed to preserve double quotes
372             qualifier end_of_file,  value(required) ! Make /EOF=1, /ERROR=2 for
373             qualifier error,        value(required) ! all file commands
374             qualifier key,          value(required,list)
375             qualifier index,        value(required)
376             qualifier delete
377             qualifier lock,         default
378             qualifier prompt,       value(required)
379             qualifier match,        value(required,type=match_keys)
380             qualifier time_out      value(required,type=$number)
381
382     define syntax recall_all_commands
383             cliroutine recall
384             noparameters
385
386     define verb recall
387             cliroutine recall
388             parameter p1,value(type=$rest_of_line)
389             qualifier all,syntax=recall_all_commands
390
391     define syntax stop_cpu
392             image mp
```

F 6

16-SEP-1984 03:59   VAX/VMS Command Definition Utility (V4-001)   Page 8
15-SEP-1984 22:42   _255DUA28:[CLD.SRC]DCLINT.CLD;1 (1)

```
393          noparameters
394
395   define syntax stop_queue
396          image queman
397          parameter p1,prompt="Queue",value(required)
398
399   define syntax stop_queue_manager
400          image queman
401          noparameters
402
403   define syntax write_symbol_out
404          parameter p1,prompt="Log name",value(required,type=$inlog)
405          parameter p2,prompt="Symbol",value(required,list,type=$quoted_string)
406
407
408   define verb stop
409          cliroutine stop
410          cliflags(nostatus)
411          parameter p1,prompt="Process",value(type=$process)
412          qualifier manager,       nonnegatable,syntax=stop_queue_manager
413          qualifier abort,         nonnegatable,syntax=stop_queue
414          qualifier next,          nonnegatable,syntax=stop_queue
415          qualifier identification,nonnegatable,value(required)
416          qualifier requeue,       nonnegatable,value,syntax=stop_queue
417          qualifier entry,         nonnegatable,value(required),syntax=stop_queue
418          qualifier priority,      nonnegatable,value(required),syntax=stop_queue
419          qualifier cpu,           nonnegatable,syntax=stop_cpu
420          qualifier queue,         nonnegatable,syntax=stop_queue
421          qualifier hold,          syntax=stop_queue
422          qualifier reset,         nonnegatable,syntax=stop_queue
423
424   define verb wait
425          cliroutine wait
426          cliflags(immediate,nostatus)
427
428   define verb write
429          cliroutine write
430          prefix cli$k_writ_
431          parameter p1,prompt="Log name",value(required,type=$inlog)
432          parameter p2,prompt="Expression",value(required,list,type=$expression)
433          qualifier end_of_file,   value(required) ! Make /EOF=1, /ERROR=2 for
434          qualifier error,         value(required) ! all file commands
435          qualifier update
436          qualifier symbols,       nonnegatable,syntax=write_symbol_out
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1    ! Version:     'V04-000'
 2
 3        V03-014 PCB0002         Peter George            13-Mar-1984
 4        Remove last vestiges of old command interface
 5        from DELETE command definition.  Add DEL/SYM/LOG.
 6
 7        V03-013 WMC0004         Wayne Cardoza           16-Jan-1984
 8        Remoce all CHKPNT stuff
 9
10        V03-012 SHZ0004         Stephen H. Zalewski     10-Dec-1983
11        Remove the /ON qualifier from DELETE and PURGE as it
12        will not be implemented.
13
14        V03-011 WMC0003         Wayne Cardoza           31-Aug-1983
15        CHECKPOINT should use BY_OWNER
16
17        V03-010 MLJ0010         Martin L. Jack          27-Mar-1983
18        Add DELETE/FORM and DELETE/CHARACTERISTIC.
19
20        V03-009 PCG001          Peter George            28-Mar-1983
21        Add DELETE/KEY.
22
23        V03-008 PCA1008         Paul C. Anagnostopoulos 25-Mar-1983
24        Make all necessary changes for new CDU.
25
26        V03-007 SHZ003  Stephan H. Zalewski             12-Mar-1983
27        Changed /BYOWNER to /BY_OWNER for DELETE and PURGE.
28
29        V03-006 PCA1008         Paul C. Anagnostopoulos 10 Feb 1983
30        Change /UIC qualifiers to /BYOWNER.
31
32        V03-005 SHZ0002         Stephen H. Zalewski     21-Jan-1983
33        Add /ON qualifier to DELETE and PURGE.
34
35        V03-004 WMC0002         Wayne Cardoza           19-Jan-1983
36        Add /LOG to DEL/CHECKPOINT
37
38        V03-003 WMC0001         Wayne Cardoza           05-Jan-1983
39        New DEL/CHECKPOINT qualifiers.
40
41        V03-002 SHZ0001         Stephen H. Zalewski     5-Dec-1982
42        Add a bunch of new qualifiers for both DELETE and PURGE.
43
44        V03-001 MAJ0001         Melanie Johnson 07-Oct-1982
45        Put mcrignore flag into cliflags construct.
46
47   define syntax delete_characteristic
48        image queman
49        parameter p1,prompt="Char name",value(required)
50
51   define syntax delete_form
52        image queman
53        parameter p1,prompt="Form name",value(required)
54
55   define syntax delete_entry_or_queue
```

```
57         image queman
58         parameter p1,prompt="Queue",value(required)
59
60 define syntax delete_all_symbols
61         noparameters
62
63 define syntax delete_symbol
64         cliroutine delsym
65         prefix cli$k_dlsy_
66         parameter p1,prompt="Symbol",value(required,type=$insym)
67         qualifier all,              syntax=delete_all_symbols
68         qualifier global
69         qualifier local
70         qualifier log
71
72 !**JNL** define syntax delete_checkpoint
73 !**JNL**         image chkcancmd
74 !**JNL**         parameter p1,prompt="File",value(required,list,impcat,type=$infile)
75 !**JNL**         qualifier log
76 !**JNL**         qualifier created
77 !**JNL**         qualifier modified
78 !**JNL**         qualifier confirm
79 !**JNL**         qualifier since,       value(default=today,type=$datetime)
80 !**JNL**         qualifier before,      value(default=today,type=$datetime)
81 !**JNL**         qualifier expired
82 !**JNL**         qualifier by_owner,    value(type=$uic)
83 !**JNL**         qualifier exclude,     value(required,list)
84
85 define syntax delete_all_keys
86         noparameters
87
88 define syntax delete_key
89         cliroutine delkey
90         prefix cli$k_delk_
91         parameter p1,prompt="Key name",value(required)
92         qualifier log
93         qualifier state,value(required,list)
94         qualifier all,syntax=delete_all_keys
95
96 define verb delete
97         image delete
98         parameter p1,prompt="File",value(required,list,impcat,type=$infile), label=input
99         qualifier backup
100        qualifier before,          value(default=today,type=$datetime)
101 !**JNL**        qualifier checkpoint,    syntax=delete_checkpoint
102        qualifier confirm
103        qualifier created
104        qualifier entry,           value(required,list),syntax=delete_entry_or_queue
105        qualifier erase
106        qualifier exclude,         value(required,list)
107        qualifier expired
108        qualifier log
109        qualifier modified
110        qualifier queue,           cliflags(mcrignore),syntax=delete_entry_or_queue
111        qualifier since,           value(default=today,type=$datetime)
112        qualifier symbol,          cliflags(mcrignore),syntax=delete_symbol
```

```
   113          qualifier by_owner,      value(type=$uic)
   114          qualifier key,           cliflags(mcrignore),syntax=delete_key
   115          qualifier characteristic,syntax=delete_characteristic
   116          qualifier form,          syntax=delete_form
   117
   118   define verb purge
   119          image delete
   120          parameter p1.prompt="File",value(list,impcat,type=$infile,default="*.*"), label=input
   121          qualifier backup
   122          qualifier before,        value(default=today,type=$datetime)
   123          qualifier confirm
   124          qualifier created
   125          qualifier erase
   126          qualifier exclude,       value(required,list)
   127          qualifier expired
   128          qualifier keep,          value(required)
   129          qualifier log
   130          qualifier modified
   131          qualifier since,         value(default=today,type=$datetime)
   132          qualifier by_owner,      value(type=$uic)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1    MODULE dif_command
 2    !
 3    ! Version:    'V04-000'
 4    !
 5    !    V03-001 PCG0001        Peter George           30-Mar-1983
 6    !                Use CLI keyword parsing.
 7    !
 8
 9    define type ignore_keywords
10          keyword blank_lines
11          keyword comments
12          keyword form_feeds
13          keyword header,value(default=2,type=$number)
14          keyword trailing_spaces
15          keyword spacing
16          keyword edited,default
17          keyword exact
18          keyword pretty
19
20    define type mode_keywords
21          keyword ascii,default
22          keyword hexadecimal
23          keyword octal
24
25    define type separated_keywords
26          keyword master,default
27          keyword revision,default
28
29    define verb differences
30          image diff
31          parameter p1,prompt="File 1",value(required,list,impcat,type=$infile),label=input1
32          parameter p2,prompt="File 2",value(type=$infile),label=input2
33          qualifier change_bar,    placement=local,value(list)
34          qualifier comment_delimiters,value(list)
35          qualifier ignore,        default,value(list,type=ignore_keywords)
36          qualifier line_width,    value(required,type=$number)
37          qualifier match,         value(required,type=$number)
38          qualifier maximum_differences,value(required,type=$number)
39          qualifier merged,        value(type=$number)
40          qualifier mode,          default,value(list,type=mode_keywords)
41          qualifier output,        value(type=$outfile)
42          qualifier parallel,      value(type=$number)
43          qualifier separated,     value(list,type=separated_keywords)
44          qualifier slp
45          qualifier width,         value(required,type=$number)
46          qualifier window,        value(required,type=$number)
47          qualifier number,        default
48
49          disallow (slp AND (merged OR parallel OR separated OR change_bar OR
50                     hexadecimal OR octal OR line_width OR width OR
51                     pretty OR edited OR number))
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  ! DIRECTORY.CLD
 2  !
 3  ! Version:    'V04-000'
 4  !
 5  ! Modification history:
 6  !
 7  !     V03-002 LMP0276         L. Mark Pilant,         11-Jul-1984  11:43
 8  !             Make applicable qualifiers negatable.  Also, remove
 9  !             the default value for the /OUTPUT qualifier as it is
10  !             defaulted in the DIRECTORY image.
11  !
12  !     V03-001 MCN0173         Maria del C. Nasr       25-Jun-1984
13  !             Make the /OUTPUT qualifier default to SYS$OUTPUT, and
14  !             negatable.
15  !
16  define type date_options
17      keyword all,            nonnegatable
18      keyword created,        default,nonnegatable
19      keyword expired,        nonnegatable
20      keyword modified,       nonnegatable
21      keyword backup,         nonnegatable
22
23  define type size_options
24      keyword all,            nonnegatable
25      keyword allocation,     nonnegatable
26      keyword used,           default,nonnegatable
27
28  define type width_options
29      keyword display,        default,value(default=0),nonnegatable
30      keyword filename,       default,value(default=19),nonnegatable
31      keyword owner,          default,value(default=20),nonnegatable
32      keyword size,           default,value(default=6),nonnegatable
33
34  define type sel_size_options
35      keyword minimum_size,   default,value(default=0),nonnegatable
36      keyword maximum_size,   default,value(default=1073741823),nonnegatable
37
38  define type select_options
39      keyword size,           default,value(list,type=sel_size_options),nonnegatable
40      keyword acl,            nonnegatable
41
42  define type owner_options
43      keyword identifier
44
45  define verb directory
46      image directory
47      parameter p1,prompt="File",value(list,impcat,type=$infile),label=INPUT
48      qualifier acl
49      qualifier backup
50      qualifier before,       value(default=TODAY,type=$datetime)
51      qualifier brief,        default,nonnegatable
52      qualifier by_owner,     value(type=$uic)
53      qualifier columns,      default,value(default=4)
54      qualifier created
55      qualifier date,         value(list,type=date_options)
56      qualifier exclude,      value(required,list)
```

```
57          qualifier expired
58          qualifier file_id
59          qualifier full
60          qualifier grand_total
61          qualifier heading,       default
62          qualifier modified
63          qualifier output,        default,value(type=$file)
64          qualifier owner,         value(type=owner_options)
65          qualifier printer
66          qualifier protection
67          qualifier security
68          qualifier select,        value(required,list,type=select_options)
69          qualifier since,         value(default=TODAY,type=$datetime)
70          qualifier size,          value(list,type=size_options)
71          qualifier total
72          qualifier trailing,      default
73          qualifier versions,      value(required)
74          qualifier width,         default,value(list,type=width_options)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !    Version:        'V04-000'
 2  !
 3  !
 4  !        V03-004 HH0004          Hai Huang              28-Feb-1984
 5  !                Add DISMOUNT CLUSTER qualifier.
 6  !
 7  !        V03-003 HH0003          Hai Huang              16-Feb-1983
 8  !                Add DISMOUNT ABORT qualifier.
 9  !
10  !        V03-002 MCN0135         Maria del C. Nasr      31-Oct-1983
11  !                Eliminate prefix clause, since it is not needed with
12  !                the new CLI interface.
13  !
14  !        V03-001 PCA1008         Paul C. Anagnostopoulos 10 Feb 1983
15  !                Remove the MCR DMO verb name, because the DMO command has
16  !                become a separate CLD.
17  !                Add a comment about the equivalent CLD for MCR.
18  !
19  ! Don't forget the DMO.CLD file.  It contains an equivalent set of
20  ! definitions for MCR which must also be enhanced.
21  !
22  define verb dismount
23          image dismount
24          parameter p1,prompt="Device",value(required,type=$device),label=device
25          qualifier unload,default
26          qualifier unit
27          qualifier abort
28          qualifier cluster
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
  1  !
  2  !    Version:      'V04-000'
  3  !
  4  !      SHZ0001 Stephen H. Zalewski                12-Apr-1984
  5  !              Move all checks for conflicting qualifiers from DUMP image
  6  !              to the CLD.
  7  !
  8  define type dump_blocks
  9        keyword start,         value(type=$number)
 10        keyword end,           value(type=$number)
 11        keyword count,         value(type=$number)
 12
 13  define verb dump
 14        parameter p1,prompt="File",value(required,type=$infile),label=input
 15        qualifier allocated
 16        qualifier ascii
 17        qualifier blocks,      value(list,type=dump_blocks)
 18        qualifier byte
 19        qualifier decimal
 20        qualifier file_header
 21        qualifier formatted,   default
 22        qualifier header
 23        qualifier hexadecimal
 24        qualifier longword
 25        qualifier number,      value(type=$number)
 26        qualifier octal
 27        qualifier output,      value(type=$outfile)
 28        qualifier printer
 29        qualifier records,     value(list,type=dump_blocks)
 30        qualifier word
 31
 32        disallow   any2(octal,decimal,hexadecimal)
 33        disallow   any2(byte,word,longword)
 34        disallow   records and blocks
 35        disallow   printer and output
 36        disallow   records and allocated
 37        disallow   blocks.end and blocks.count
 38        disallow   records.end and records.count
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1   !    Version:     'V04-000'
 2
 3
 4   !        V03-012 PCB0002         Peter George            13-Mar-1984
 5   !                Remove last vestiges of old command inteface.
 6
 7   !        V03-011 RRB0012         Rowland R. Bradley      04-Jan-1984
 8   !                Disallow /NOINTERACTIVE with /DISPLAY, /CREATE, /RESP,
 9   !                /SCRIPT, /NUMBER_KEYS and/or /PROMPTING.
10
11   !        V03-010 LMP0185         L. Mark Pilant,         31-Jan-1984  11:31
12   !                Add support for the EDIT/ACL/OBJECT=type command.
13
14   !        V03-009 DLB0001         David Ballenger         29-Jul-1983
15   !                Add separate syntax definition for EDIT/SLP and comment
16   !                out qualifiers, etc, for EDIT/SOS.  The EDIT/SOS definitions
17   !                can be ''permanently'' removed at a later date.
18
19   !        V03-008 MHB0096         Mark Bramhall           28-Jul-1983
20   !                Add EDIT/TECO.
21
22   !        V03-007 PCG0001         Peter George            27-Jul-1983
23   !                Add EDIT/DPE.
24
25   !        V03-006 LMP0107         L. Mark Pilant,         28-Apr-1983  9:14
26   !                Set the correct default for the /MODE qualifier
27
28   !        V03-005 KFH0002         Ken Henderson           26 Apr 1983
29   !                Add /SCRIPT keywords to EDIT/FDL:
30   !                add_key, delete_key, redesign => touchup
31
32   !        V03-004 KFH0001         Ken Henderson           14 Apr 1983
33   !                Add qualifiers to EDIT/FDL:
34   !                /DISPLAY/EMPHASIS/GRANULARITY
35   !                /RESPONSES/INTERACTIVE/CREATE
36   !                /NUMBER_KEYS
37
38   !        V03-003 PCA1008         Paul C. Anagnostopoulos 25-Feb-1983
39   !                Replace the ZZZZ qualifiers with something more reasonable,
40   !                since the new CDU requires unique names.
41
42   !        V03-002 PCA1008         Paul C. Anagnostopoulos 11 Feb 1983
43   !                Add a comment about the equivalent CLD for MCR.
44
45   !        V03-001 LMP0072         L. Mark Pilant,         19-Jan-1983  22:10
46   !                Incorporate the ACL editor into the build.  It is invoked
47   !                with the EDIT/ACL DCL command.
48
49   ! Don't forget the EDT.CLD file.  It contains an equivalent set of
50   ! definitions for MCR which must also be enhanced, but only for EDT.
51
52   define type keep_file
53           keyword recovery
54           keyword journal
55
56   define type mode_types
```

```
 57        keyword prompt          default,negatable
 58
 59   define type acl_objects
 60        keyword file
 61        keyword device
 62        keyword queue
 63        keyword event_cluster
 64        keyword logical_name_table
 65        keyword process
 66        keyword global_section
 67
 68   define syntax acledit
 69        image acledt
 70        parameter p1,prompt="Object Name",value(required,type=$infile),label=input
 71        qualifier journal,      default,value(type=$infile)
 72        qualifier recover,      value(type=$infile)
 73        qualifier keep,         value(list,type=keep_file)
 74        qualifier mode,         default,value(type=mode_types)
 75        qualifier object_type,  value(type=acl_objects)
 76
 77   define syntax teco_mung
 78        parameter p1            !!!, value(type=$rest_of_line)
 79
 80   define syntax edit_using_teco
 81        image teco
 82        qualifier command,      default,value(type=$infile)
 83        qualifier create,       default
 84        qualifier memory,       default
 85        qualifier execute,      value(required,type=$infile),syntax=teco_mung
 86        parameter p1,           value(type=$infile)
 87        qualifier output,       value(required,type=$outfile)
 88        qualifier read_only
 89
 90   define syntax edit_using_dpe
 91        image dpe
 92        parameter p1,           label=input,prompt="File",
 93                                value(required,type=$infile)
 94        qualifier command,      default,value(type=$infile)
 95        qualifier context,      default,value(type=$infile)
 96        qualifier journal,      default,value(type=$infile)
 97        qualifier output,       default,value(type=$outfile)
 98        qualifier read_only
 99        qualifier recover
100
101   define type script_options
102        keyword add_key
103        keyword delete_key
104        keyword indexed
105        keyword optimize
106        keyword relative
107        keyword sequential
108        keyword touchup
109
110   define type prpt_options
111        keyword brief
112        keyword full
```

```
113
114     define type disp_options
115             keyword line
116             keyword fill
117             keyword add
118             keyword init
119             keyword record
120             keyword key
121
122     define type emph_options
123             keyword flatter
124             keyword smaller
125
126     define type gran_options
127             keyword one
128             keyword two
129             keyword three
130             keyword four
131             keyword double
132             keyword 1
133             keyword 2
134             keyword 3
135             keyword 4
136
137     define type resp_options
138             keyword automatic
139             keyword manual
140
141     define syntax edf
142             image edf
143             parameter p1,label=p1,prompt="File",value(required,type=$infile)
144             qualifier output,       value(required,type=$outfile)
145             qualifier analysis,     value(required,type=$infile)
146             qualifier interactive,  default
147             qualifier emphasis,     value(required,type=emph_options)
148             qualifier granularity,  value(required,type=gran_options)
149             qualifier create
150             qualifier number_keys,  value(required)
151             qualifier display,      value(required,type=disp_options)
152             qualifier responses,    value(required,type=resp_options)
153             qualifier script,       value(required,type=script_options)
154             qualifier prompting,    value(required,type=prpt_options)
155             disallow        (neg interactive) and (create or number_keys or
156                             display or responses or script or prompting)
157
158
159
160     !SOS define syntax edit_using_sos
161     !SOS   image backtrans
162
163     define type slp_audit_options
164             keyword position,       value(type=$number,default=80), default
165             keyword size,           value(type=$number,default=8),  default
166
167     define syntax edit_using_slp
168             image backtrans
```

```
169         parameter p1,           prompt="File",
170                                 value(required,type=$infile),label=input
171         qualifier audit_trail,  value(list,type=slp_audit_options)
172         qualifier checksum,     value(type=$number)
173         qualifier listing,      value(type=$outfile)
174         qualifier output,       value(type=$outfile),default
175         qualifier report
176         qualifier truncate,     value(type=$number)
177         qualifier tab
178
179 define syntax sumslp
180         image sumslp
181
182 define verb edit
183         image edt
184         parameter p1,prompt="File",value(required,type=$infile),label=input
185 !SOS    qualifier decide
186 !SOS    qualifier exact
187 !SOS    qualifier expert
188 !SOS    qualifier increment,    value
189 !SOS    qualifier isave,        value
190 !SOS    qualifier line
191         qualifier listing,      value(type=$outfile)
192 !SOS    qualifier lower
193         qualifier output,       value(type=$outfile)
194 !SOS    qualifier pline,        value
195         qualifier read_only
196 !SOS    qualifier save,         value
197         qualifier slp,          syntax=edit_using_slp
198 !SOS    qualifier sos,          syntax=edit_using_sos
199 !SOS    qualifier start,        value
200 !SOS    qualifier step,         value
201         qualifier header
202         qualifier sum,          syntax=sumslp
203         qualifier update,       value(list),placement=local
204         qualifier edt
205         qualifier command,      default,value(type=$infile)
206         qualifier recover
207         qualifier journal,      default,value(type=$infile)
208         qualifier $1_filler,    label=dmy1
209         qualifier $2_filler,    label=dmy2
210 !SOS    qualifier bak,          default
211 !SOS    qualifier num,          default
212         qualifier fdl,          syntax=edf
213         qualifier create,       default
214         qualifier acl,          syntax=acledit
215         qualifier dpe,          syntax=edit_using_dpe
216         qualifier teco,         syntax=edit_using_teco
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1   !    Title encrypt.cld Command Definition for ENCRYPT/DECRYPT
 2   !    Version 'V04-000'
 3   !
 4   !
 5   !  Modified by:
 6   !
 7   !    V01-002 MSH0073        Michael S. Harvey        15-Aug-1984
 8   !            Add support for /JOB qualifier.
 9   !
10   !    V01-001 JEP0004        J. Eric Pollack          12-Aug-1983
11   !            Revise syntax. Remove /supermode...
12   !
13   !
14   !
15   !
16   !  Command definition for the VAX/VMS ENCRYPTION Facility
17   !
18   !
19   !
20   !  define the type for the /ALGORITHM= list
21   !
22   DEFINE TYPE algorithm_option
23        KEYWORD DES,
24        KEYWORD DESECB,
25        KEYWORD DESCBC,default
26        KEYWORD DESCFB,
27        KEYWORD DESDAC,
28        KEYWORD RSA,
29        KEYWORD ALC,
30        KEYWORD VPA,
31        KEYWORD NUL
32   !
33   !  Define the syntax of the facility command to define encryption keys
34   !
35   define syntax create_encrypt_key
36        qualifier CREATE_KEY,default
37        parameter p1,prompt="Key Name",value(required,type=$inlog)
38        parameter p2,prompt="Key Value",value(required,type=$outlog)
39        qualifier compress
40        qualifier group
41        qualifier hexadecimal,negatable,value(default=NOHEXADECIMAL)
42 :3     qualifier hexadecimal,value(default=NOHEXADECIMAL)
43        qualifier log
44        qualifier parity
45        qualifier process,default
46        qualifier system
47        qualifier job
48        disallow any2(system,group,process,job)
49        disallow hexadecimal and compress
50        disallow hexadecimal and parity
51   !
52   !  Define the syntax of the facility command to delete encryption keys
53   !
54   define syntax eliminate_encrypt_key
55        qualifier REMOVE_KEY,default
56 :3         qualifier CREATE_KEY,negatable,value(default="NOCREATE_KEY")
```

```
 57            qualifier CREATE_KEY,value(default="NOCREATE_KEY")
 58            parameter p1,prompt="Key Name",value(required,type=$inlog)
 59            qualifier system
 60            qualifier group
 61            qualifier job
 62            qualifier process,default
 63            qualifier log
 64            disallow any2(system,group,process,job)
 65     !
 66     ! Define the syntax of the facility command to test the encryption interfaces
 67     !
 68     DEFINE SYNTAX syntax_test
 69            QUALIFIER TEST-FACILITY,default
 70     !$            qualifier CREATE_KEY,negatable,value(default="NOCREATE_KEY")
 71     !$            qualifier REMOVE_KEY,negatable,value(default="NOREMOVE_KEY")
 72            qualifier CREATE_KEY,value(default="NOCREATE_KEY")
 73            qualifier REMOVE_KEY,value(default="NOREMOVE_KEY")
 74            QUALIFIER algorithm, VALUE(LIST,
 75                         TYPE=algorithm_option)
 76            QUALIFIER input,  DEFAULT, VALUE(DEFAULT="SYS$INPUT",TYPE=$INFILE)
 77            QUALIFIER log
 78            QUALIFIER output, DEFAULT, VALUE(DEFAULT="SYS$OUTPUT",TYPE=$OUTFILE)
 79            QUALIFIER select, VALUE(LIST,DEFAULT="QUICK")
 80            NOPARAMETERS
 81     !
 82     ! Define the root commands
 83     !
 84     DEFINE VERB ENCRYPT
 85            IMAGE encryptfac
 86            QUALIFIER CREATE_KEY,SYNTAX = create_encrypt_key
 87            QUALIFIER REMOVE_KEY,SYNTAX = eliminate_encrypt_key
 88            QUALIFIER TEST_FACILITY,SYNTAX = syntax_test
 89            QUALIFIER log
 90            PARAMETER P1,
 91                    LABEL=INPUT,
 92                    PROMPT="Input File(s)",
 93                    VALUE(REQUIRED,LIST)
 94            PARAMETER P2,
 95                    LABEL=KEY,
 96                    PROMPT="Key Name",
 97                    VALUE(REQUIRED,TYPE=$INLOG)
 98            QUALIFIER algorithm,
 99                    VALUE(LIST,TYPE=algorithm_option)
100            QUALIFIER delete
101            QUALIFIER erase
102            QUALIFIER output,
103                    DEFAULT,
104                    VALUE(TYPE=$OUTFILE)
105            QUALIFIER statistics
106            qualifier confirm
107            qualifier exclude,value(list)
108            qualifier before,value(default=today)
109            qualifier since,value(default=today)
110            qualifier by_owner,value(type=$uic)
111
112     DEFINE VERB DECRYPT
```

```
113        IMAGE encryptac
114        PARAMETER P1,
115            LABEL=INPUT,
116            PROMPT="Input File(s)",
117            VALUE(REQUIRED,LIST)
118        PARAMETER P2,
119            LABEL=KEY,
120            PROMPT="Key Name"
121            VALUE(REQUIRED,TYPE=$INLOG)
122        QUALIFIER algorithm,
123            VALUE(LIST,TYPE=algorithm_option)
124        QUALIFIER delete
125        QUALIFIER erase
126        QUALIFIER log
127        QUALIFIER output,
128            DEFAULT,
129            VALUE(TYPE=$OUTFILE)
130        QUALIFIER statistics
131        qualifier confirm
132        qualifier exclude,value(list)
133        qualifier before,value(default=today)
134        qualifier since,value(default=today)
135        qualifier by_owner,value(type=$uic)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1   MODULE exchange
 2
 3     Version:    'V04-000'
 4
 5
 6   !***********************************************************************
 7   !*
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25   !*                                                                    *
26   !*                                                                    *
27   !***********************************************************************
28
29
30   DEFINE VERB  exchange
31
32        IMAGE  exchange
33
34        PARAMETER P1, LABEL=command, VALUE(TYPE=$REST_OF_LINE)
35
36        QUALIFIER        cache
37        QUALIFIER        message DEFAULT
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1          Version:     'V04-000'
 2
 3              V03-002 MCN0173       Maria del C. Nasr      25-Jun-1984
 4                      Make /OUTPUT qualifier default to SYS$OUTPUT
 5
 6              V03-001 PCG0001       Peter George           11-Apr-1984
 7                      Add DISALLOW statements.
 8
 9
10
11      DEFINE TYPE scope_keywords
12          KEYWORD             ALL,default
13          KEYWORD             NONE
14          KEYWORD             PROCESS
15          KEYWORD             GROUP
16          KEYWORD             SYSTEM
17
18      DEFINE VERB HELP
19          IMAGE VMSHELP
20          PARAMETER           P1,label=keywords,
21                              value(type=$rest_of_line)
22          QUALIFIER           PROMPT,default
23          QUALIFIER           PAGE,default
24          QUALIFIER           INSTRUCTIONS,default
25          QUALIFIER           OUTPUT,default,
26                              value(type=$file,default="SYS$OUTPUT")
27          QUALIFIER           LIBRARY,default,
28                              value(type=$infile,default="HELPLIB")
29          QUALIFIER           LIBLIST,default
30          QUALIFIER           USERLIBRARY,default,negatable,
31                              value(type=scope_keywords,list)
32          DISALLOW            (ALL and NONE)
33          DISALLOW            (ALL or NONE) and (PROCESS or GROUP or SYSTEM)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
  1      Version:    'V04-000'
  2
  3          V03-016 JAK0227        J A Krycka            17-Aug-1984
  4          Disallow certain printer queue specific qualifiers to be used
  5          with /BATCH and /GENERIC.
  6
  7          V03-015 JAK0226        J A Krycka            16-Aug-1984
  8          Omit "list" as an attribute for the /OWNER_UIC qualifier.
  9
 10          V03-014 JAK0220        J A Krycka            12-Jul-1984
 11          Add [NO]FEED option to the /DEFAULT qualifier.
 12
 13          V03-013 MCN0174        Maria del C. Nasr     09-Jul-1984
 14          Make qualifiers negatable to follow the standard rule.
 15
 16          V03-012 PCG0001        Peter George          20-Feb-1984
 17          Modify behavior of INIT/QUEUE/BLOCK.
 18
 19          V03-011 MCN0144        Maria del C. Nasr     19-Jan-1984
 20          Fix image name for INITIALIZE.
 21
 22          V03-010 MCN0140        Maria del C. Nasr     23-Nov-1983
 23          Change to new CLI interface for INIT image.
 24
 25          V03-009 MLJ0009        Martin L. Jack  29-Jul-1983
 26          Add /LIBRARY and /SCHEDULE.
 27
 28          V03-008 MAJ0002        Melanie Johnson 22-Jun-1983
 29          Put mcrignore flag on the init/queue qualifiers.
 30
 31          V03-007 MLJ0007        Martin L. Jack  27-May-1983
 32          Changes for new QUEMAN image.
 33
 34          V03-006 MLJ0006        Martin L. Jack  27-Apr-1983
 35          Changes for new QUEMAN image.
 36
 37          V03-005 STJ3087        Steven Jeffreys 24-Apr-1983
 38          Added /[NO]ERASE and /[NO]HIGHWATER.
 39
 40          V03-004 MMD0076        Meg Dumont      08-Apr-1983
 41          Added support for new qualifiers on /LABEL and /OVERRIDE and
 42          added the /INTERCHANGE qualifier
 43
 44          V03-003 MLJ0002        Martin L. Jack  03-Jan-1982
 45          Changes for new QUEMAN image.
 46
 47          V03-001 MAJ0001        Melanie Johnson 07-Oct-1982
 48          Put mcrignore flag into cliflags construct.
 49
 50  define type print_bft
 51      keyword all,default
 52      keyword one
 53
 54  define type defaults
 55      keyword burst,negatable,value(type=print_bft)
```

```
 57             keyword feed,negatable
 58             keyword flag,negatable,value(type=print_bft)
 59             keyword trailer,negatable,value(type=print_bft)
 60
 61     define type retain
 62             keyword all,default
 63             keyword error
 64
 65     define type schedule
 66             keyword size,negatable
 67
 68     define type separate
 69             keyword burst,negatable
 70             keyword flag,negatable
 71             keyword reset,negatable,value(required,list)
 72             keyword trailer,negatable
 73
 74     define type protection
 75             keyword system,value
 76             keyword group,value
 77             keyword owner,value
 78             keyword world,value
 79
 80     define type init_overrides
 81             keyword expiration
 82             keyword accessibility
 83             keyword owner_identifier
 84
 85     define type datacheck_options
 86             keyword read
 87             keyword write
 88
 89     define type index_position
 90             keyword beginning
 91             keyword middle
 92             keyword end
 93             keyword block,value(required)
 94
 95     define type ansi
 96             keyword volume_accessibility,value(required)
 97             keyword owner_identifier,value(required,type=$infile)
 98
 99     define syntax init_queue
100             image queman
101             parameter p1,prompt="Queue",value(required)
102
103     define verb initialize
104             image init
105             parameter p1,prompt="Device",value(required,type=$device),label=device
106             parameter p2,prompt="Label",value(required),label=volume
107             qualifier accessed,     value(required,type=$number)
108             qualifier badblocks,    value(required,list)
109             qualifier base_priority,value(required),cliflags(mcrignore),syntax=init_queue
110             qualifier batch,                cliflags(mcrignore),syntax=init_queue
111             qualifier block_limit,  value(list),cliflags(mcrignore),syntax=init_queue
112             qualifier characteristics,cliflags(mcrignore),syntax=init_queue,value(required,list)
```

```
113         qualifier cluster_size, value(required,type=$number)
114         qualifier cpudefault,   value(required),cliflags(mcrignore),syntax=init_queue
115         qualifier cpumaximum,   value(required),cliflags(mcrignore),syntax=init_queue
116         qualifier data_check,   value(list,type=datacheck_options)
117         qualifier default,      value(required,list,type=defaults),cliflags(mcrignore),syntax=init_queue
118         qualifier density,      value(required)
119         qualifier directories,  value(required,type=$number)
120         qualifier disable_swapping,cliflags(mcrignore),syntax=init_queue
121         qualifier enable_generic,cliflags(mcrignore),syntax=init_queue
122         qualifier erase
123         qualifier extension,    value(required,type=$number)
124         qualifier file_protection,value(required,list,type=protection)
125         qualifier form,         value(required),cliflags(mcrignore),syntax=init_queue
126         qualifier generic,      value(list),cliflags(mcrignore),syntax=init_queue
127         qualifier group
128         qualifier headers,      value(required,type=$number)
129         qualifier highwater,    default
130         qualifier index,        value(required,type=index_position)
131         qualifier interchange
132         qualifier job_limit,    value(required),cliflags(mcrignore),syntax=init_queue
133         qualifier label,        value(required,list,type=ansi)
134         qualifier library,      value(required),cliflags(mcrignore),syntax=init_queue
135         qualifier maximum_files,value(required,type=$number)
136         qualifier on,           value(type=$infile,required),cliflags(mcrignore),syntax=init_queue
137         qualifier override,     value(required,list,type=init_overrides)
138         qualifier owner_uic,    value(required,type=$uic)
139         qualifier processor,    value(required),cliflags(mcrignore),syntax=init_queue
140         qualifier protection,   value(required,list,type=protection)
141         qualifier queue,        cliflags(mcrignore),syntax=init_queue
142         qualifier retain,       value(type=retain),cliflags(mcrignore),syntax=init_queue
143         qualifier schedule,     value(required,list,type=schedule),cliflags(mcrignore),syntax=init_queue
144         qualifier separate,     value(required,list,type=separate),cliflags(mcrignore),syntax=init_queue
145         qualifier share,        default
146         qualifier start,        cliflags(mcrignore),syntax=init_queue
147         qualifier structure,    value(required,type=$number)
148         qualifier system
149         qualifier terminal,     cliflags(mcrignore),syntax=init_queue
150         qualifier user_name,    value(required)
151         qualifier verified,     default
152         qualifier windows,      value(required,type=$number)
153         qualifier wsdefault,    value(required),cliflags(mcrignore),syntax=init_queue
154         qualifier wsextent,     value(required),cliflags(mcrignore),syntax=init_queue
155         qualifier wsquota,      value(required),cliflags(mcrignore),syntax=init_queue
156     disallow group and system
157     disallow default and (batch or generic)
158     disallow separate and (batch or generic)
159     disallow form and (batch or generic)
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1 !
 2 ! Version:    'V04-000'
 3 !
 4 !      V03-008 GJA0092        Greg Awdziewicz        25-Jul-1984
 5 !              - Reverse the nonnegatable mistake. Only qualifiers
 6 !              which require values should be nonnegatable.
 7 !
 8 !      V03-007 MCN0143        Maria del C. Nasr      29-Jun-1984
 9 !              Make nonnegatable, qualifiers that should be so. Add
10 !              the /DATA qualifier with keywords EXPAND and COMPRESS
11 !              to do the data reduction work.  Eliminate REDUCE
12 !              option from /COMPRESS.
13 !
14 !      V03-006 JWT0124        Jim Teague             16-Jun-1983
15 !              /EXTRACT requires a value; /ONLY doesn't necessarily
16 !              need /LIST.
17 !
18 !      V03-005 JWT0120        Jim Teague             18-May-1983
19 !              Remove some disallow clauses.
20 !
21 !      V03-004 JWT0103        Jim Teague             06-Apr-1983
22 !              Mutual exclusion final touches to new cli interface.
23 !              Remove prefixes and outputs; squeeze becomes default
24 !              as stated by documentation.
25 !
26 !      V03-003 PCA1008        Paul C. Anagnostopoulos 10 Feb 1983
27 !              Merge the outputs list for DCL and MCR, because the CDU no
28 !              longer supports different lists.
29 !
30 !      V03-002 JWT0060        Jim Teague             20-Oct-1982
31 !              Need to rearrange the new reduce keyword.
32 !
33 !      V03-001 JWT0056        Jim Teague             19-Oct-1982
34 !              Add REDUCE keyword to /COMPRESS qualifier.
35 !
36 define syntax library_only
37      parameter p1,prompt="Library",value(required,type=$infile)
38
39
40 define syntax optional_files
41      parameter p1,prompt="Library",value(required,type=$infile)
42      parameter p2,prompt="File",value(list,impcat,type=$infile)
43
44
45 define syntax library_using_lbr
46      image backtrans
47
48 define type create_options
49      keyword blocks,         value(required)
50      keyword globals,        value(required)
51      keyword modules,        value(required)
52      keyword keysize,        value(required)
53      keyword history,        value(required)
54      keyword version,        value(required)
55
56 define type compress_options
```

```
 57          keyword blocks,           value(required)
 58          keyword globals,          value(required)
 59          keyword modules,          value(required)
 60          keyword keysize,          value(required)
 61          keyword history,          value(required)
 62          keyword version,          value(required)
 63          keyword keep
 64
 65   define type cross_options
 66          keyword all
 67          keyword module
 68          keyword none
 69          keyword symbol
 70          keyword value
 71
 72   define type data_options
 73          keyword reduce
 74          keyword expand
 75
 76   define verb library
 77          image librarian
 78          parameter p1,prompt="Library",value(required,type=$infile)
 79          parameter p2,prompt="File",value(required,list,impcat,type=$infile)
 80          qualifier compress,       value(list,type=compress_options),
 81                                    syntax=library_only
 82          qualifier create,         value(list,type=create_options),
 83                                    syntax=optional_files
 84          qualifier data,           value(required,type=data_options),
 85                                    syntax=library_only,nonnegatable
 86          qualifier delete,         value(required,list),
 87                                    syntax=optional_files,nonnegatable
 88          qualifier extract,        value(required,list),
 89                                    syntax=library_only,nonnegatable
 90          qualifier insert
 91          qualifier list,           value(type=$outfile),
 92                                    syntax=optional_files
 93          qualifier remove,         value(required,list),
 94                                    syntax=optional_files,nonnegatable
 95          qualifier replace
 96          qualifier macro
 97          qualifier object
 98          qualifier output,         value(type=$outfile),default
 99          qualifier names
100          qualifier full
101          qualifier globals,        default
102          qualifier rsx11,          syntax=library_using_lbr
103          qualifier selective_search
104          qualifier squeeze,        default
105          qualifier log
106          qualifier width,          value(required),nonnegatable
107          qualifier cross_reference,value(list,type=cross_options),
108                                    syntax=library_only
109          qualifier only,           value(required,list)
110          qualifier help
111          qualifier text
112          qualifier modules,        value(required,list),placement=local
```

```
113            qualifier share
114            qualifier history
115            qualifier before,        value(default=today, type=$datetime)
116            qualifier since,         value(default=today, type=$datetime)
117            disallow ( extract and ( compress or create or delete or insert or
118                                     list or remove or replace or names or
119                                     full or globals or selective_search or
120                                     squeeze or cross_reference or width ) )
121            disallow ( compress and create )
122            disallow ( cross_reference and ( list or macro or help or text or
123                                     before or since or history ) )
124            disallow ( any2 ( help , share , text , macro , object ) )
125            disallow ( ( full or names or history or before or since )
126                            and not list )
127            disallow ( ( remove or names or globals ) and
128                            ( text or help or macro ) )
129
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1 !
 2 !    Version:      'V04-000'
 3 !
 4 !       V03-004 ADE0001        Alan D. Eldridge        12-Apr-1984
 5 !               Make /MAP, /EXE, and /SYM positional
 6 !
 7 !       V03-003 JWT0114        Jim Teague              27-Apr-1983
 8 !               Remove prefixes and outputs; map is un-defaulted.
 9 !
10 !       V03-002 JWT0099        Jim Teague              06-Apr-1983
11 !               Do mutual exclusion stuff to go along with
12 !               new interface in Linker.
13 !
14 !       V03-001 PCA1008        Paul C. Anagnostopoulos 10 Feb 1983
15 !               Merge the outputs list for DCL and MCR, as the CDU no
16 !               longer supports separate lists.
17
18 define syntax link_using_tkb
19         image backtrans
20
21 define verb link
22         image link
23         parameter p1,prompt="File",value(required,list,impcat,type=$infile)
24         qualifier brief
25         qualifier cross_reference
26         qualifier debug,         value(type=$infile)
27         qualifier executable,    value(type=$outfile),placement=positional,default
28         qualifier include,       value(required,list),placement=local
29         qualifier library,       placement=local
30         qualifier shareable,     value(type=$outfile)
31         qualifier contiguous
32         qualifier map,           value(type=$outfile),placement=positional,batch
33         qualifier options,       placement=local
34         qualifier selective_search,placement=local
35         qualifier symbol_table,  value(type=$outfile),placement=positional
36         qualifier syslib,        default
37         qualifier system,        value
38         qualifier supress,       default,value(default="SYSLIB,DEBUG,WEAK") ! && whats this?
39         qualifier rsx11,         syntax=link_using_tkb
40         qualifier full
41         qualifier concatenated,  placement=local,syntax=link_using_tkb
42         qualifier default_library,value(required,type=$infile),
43                                  syntax=link_using_tkb
44         qualifier exit,          value(default=1),syntax=link_using_tkb
45         qualifier header
46         qualifier overlay_description,syntax=link_using_tkb
47         qualifier position_independent,syntax=link_using_tkb
48         qualifier sequential,    syntax=link_using_tkb
49         qualifier trace,         default
50         qualifier tkb_options,   value(type=$infile),syntax=link_using_tkb
51         qualifier post_mortem,   syntax=link_using_tkb
52         qualifier sysshr,        default
53         qualifier userlibrary,   default,value(list)
54         qualifier p0image
55         qualifier protect
56         disallow ( ( full or brief or cross_reference ) and not map )
```

```
57          disallow ( any2 ( system , debug , shareable ) )
58          disallow ( protect and system )
59          disallow ( p0image and ( shareable or system ) )
60          disallow ( header and shareable )
61          disallow ( brief and ( cross_reference or full ) )
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1 !
 2 !    Version:    'V04-000'
 3 !
 4 !        V03-010 RRB0022 Rowland R. Bradley           21-Jun-1984
 5 !                Remove nonnegatable from /DISABLE, /ENABLE, /UPDATE
 6 !                and /LIBBRARY.
 7 !
 8 !        V03-009 PCG0001       Peter George            13-Mar-1984
 9 !                Remove last vestiges of old command inteface.
10 !                Remove DEFAULT clause from /SHOW qualifier.
11 !
12 !        V03-008 RRB0015       Rowland R. Bradley      24-Feb-1984
13 !                Remove default settings for /DISABLE and /ENABLE since
14 !                these override any switches set by the user w/ .ENABLE
15 !                or .DISABLE.  Defaults must be set in MACRO.EXE.
16 !
17 !        V03-007 RRB0014       Rowland R. Bradley      23-Feb-1984
18 !                Remove disallow of /LIB and /UPDATE. This must be
19 !                handled by the program since context(position) is
20 !                important.
21 !
22 !        V03-006 RRB0010       Rowland R. Bradley      25-Jan-1984
23 !                Set correct defaults for /DISABLE, /ENABLE, /SHOW, /LIST,
24 !                and /CROSS_REFERENCE.  Inserted "nonnegatable" where apropo.
25 !
26 !        V03-005 MTR0003       Mike Rhodes             7-Apr-1983
27 !                Correct the default keyword specification for /DEBUG.
28 !
29 !        V03-004 MTR0002       Mike Rhodes             28-Mar-1983
30 !                Modify the OBJECT and LISTING qualifiers to make them positional
31 !
32 !        V03-003 MTR0001       Mike Rhodes             24-Mar-1983
33 !                Modify the NOSHOW qualifier to accept a list of show keywords.
34 !                (This is done because negated qualifiers can't have keywords.)
35 !
36 !        V03-002 PCA1008       Paul C. Anagnostopoulos 10 Feb 1983
37 !                Merge the outputs list for DCL and MCR, as the new CDU does not
38 !                support separate lists.
39 !
40 !        V03-001 MTR0001       Mike Rhodes             9-Feb-1983
41 !                Add 'label' field to parameter specification.
42 !
43 define type enable_options
44     keyword ama
45     keyword dbg
46     keyword fpt
47     keyword gbl
48     keyword lsb
49     keyword tbk
50     keyword absolute
51     keyword debug
52     keyword truncation
53     keyword global
54     keyword suppression
55     keyword traceback
56
```

```
 57    define type show_options
 58            keyword cmd,default
 59            keyword mc,default
 60            keyword md,default
 61            keyword me
 62            keyword meb
 63            keyword conditionals
 64            keyword calls
 65            keyword definitions
 66            keyword expansions
 67            keyword binary
 68
 69    define type crf_options
 70            keyword all
 71            keyword directives
 72            keyword macros,default
 73            keyword opcodes
 74            keyword registers
 75            keyword symbols,default
 76
 77    define type debug_options
 78            keyword all,default
 79            keyword none
 80            keyword symbols
 81            keyword traceback
 82
 83    define syntax macro_using_mac
 84            image backtrans
 85
 86    define verb macro
 87            image macro32
 88            parameter p1,label=file,
 89                               prompt="File",value(required,list,type=$infile)
 90            qualifier disable,      value(required,list,
 91                               type=enable_options)
 92            qualifier enable,       value(required,list,
 93                               type=enable_options)
 94            qualifier library,      placement=local
 95            qualifier listing,      placement=positional,
 96                               value(type=$outfile),batch
 97            qualifier object,       placement=positional,
 98                               value(type=$outfile),default
 99            qualifier show,         value(list,type=show_options)
100            qualifier rsx11,        syntax=macro_using_mac
101            qualifier noshow,       value(list,type=show_options)
102            qualifier cross_reference,
103                               value(list,type=crf_options)
104            qualifier update,       value(list),placement=local
105            qualifier debug,        value(list,type=debug_options)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1      ! Version:    'V04-000'
 2      !
 3      !
 4
 5      define type reply_types
 6          keyword extract
 7
 8      define type edit_types
 9          keyword send
10          keyword reply,value(type=reply_types)
11          keyword forward
12
13      define syntax decmail
14          image decmail
15
16      define verb mail
17          image mail
18          parameter p1,prompt="File",value(type=$infile),label=file
19          parameter p2,prompt="To",value(list,impcat),label=tolist
20          qualifier subject,       value(required)
21          qualifier decmail,       syntax=decmail
22          qualifier edit,value(list,type=edit_types)
23          qualifier protocol value(required)
24          qualifier self
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1   ! MESSAGE.CLD -- Command Languge Definition file for the MESSAGE compiler.
 2   !
 3   ! Version:    'V04-000'
 4   !
 5   !
 6   !    V03-002 GJA0061         Greg Awdziewicz          9-Jan-1984
 7   !            - Remove the pseudo qualifier /noObject now that the negatable
 8   !            operator is allowed in the Disallow clause.
 9   !
10   !    V03-001 GJA0054         Greg Awdziewicz          1-Dec-1983
11   !            - Make changes for the new CLI interface and fix the behavior
12   !            to be consistent with the Command Language User's Guide rules
13   !            and to enforce the restrictions on mutually exclusive
14   !            qualifiers.
15   !            - Change qualifiers /Listing & /File to /List & /File_name to
16   !            agree with documentation and to be consistent with other
17   !            compilers.
18
19   Define      Verb            Message
20          Image           Message
21          Parameter       P1                       ! The only parameter is the
22                          Prompt="File"            ! source file of messages.
23                          Value (required, list, type=$FILE)
24          Qualifier       FILE_NAME                ! An object file of  previously compiled messages.
25                          Value (required, type=$FILE)
26          Qualifier       LIST
27                          Batch                    ! Defaulted for batch only.
28                          Placement=positional
29                          Value (type=$FILE)
30          Qualifier       MDL                      ! (for DEC internal use -- not documented)
31                          Placement=positional
32                          Value (type=$FILE)
33          Qualifier       SDL                      ! (for DEC internal use -- not documented)
34                          Placement=positional
35                          Value (type=$FILE)
36          Qualifier       OBJECT
37                          Default
38                          Placement=positional
39                          Value (type=$FILE)
40          Qualifier       SYMBOLS
41                          Default
42          Qualifier       TEXT
43                          Default
44          Disallow        File_name and Text
45          Disallow        Neg Object and (File_name or Symbols or Text)
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1        Version:    'V04-000'
 2
 3
 4        *********************************************************************
 5        *                                                                   *
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24        *                                                                   *
25        *********************************************************************
26
27
28
29        MODIFIED BY:
30
31            V03-004 PRS1011          Paul R. Senn          29-Feb-1984     14:00
32                    add /FLUSH_INTERVAL qualifier
33
34            V03-003 TLC1052          Thomas L. Cafarella   17-Feb-1984     11:00
35                    Add /BY_NODE qualifier and change /INPUT to accept
36                    a list (in support of multi-file summary capability).
37
38            V03-002 TLC1042          Thomas L. Cafarella   19-Jun-1983     15:00
39                    Add /ITEM qualifier for homogeneous classes.
40
41            V03-001 TLC1028          Thomas L. Cafarella   14-Apr-1983     16:00
42                    Modify for interactive user interface.
43
44
45
46        define      verb      MONITOR
47            image     MONITOR
48            parameter P1,          label=CLASS_NAME,
49                                   value (list)
50            qualifier BEGINNING,   nonnegatable,
51                                   value
52            qualifier ENDING,      nonnegatable,
53                                   value
54            qualifier INTERVAL,    nonnegatable,
55                                   value
56            qualifier FLUSH_INTERVAL,      nonnegatable,
```

```
 57                                     value
 58         qualifier  VIEWING_TIME,  nonnegatable,
 59                                     value
 60         qualifier  INPUT,          value (list)
 61         qualifier  DISPLAY,        value, default
 62         qualifier  RECORD,         value
 63         qualifier  SUMMARY,        value
 64         qualifier  COMMENT,        value
 65         qualifier  BY_NODE

 66
 67         qualifier  ALL,            nonnegatable, placement=local
 68         qualifier  CURRENT,        nonnegatable, placement=local
 69         qualifier  AVERAGE,        nonnegatable, placement=local
 70         qualifier  MINIMUM,        nonnegatable, placement=local
 71         qualifier  MAXIMUM,        nonnegatable, placement=local
 72
 73         qualifier  TOPCPU,         nonnegatable, placement=local
 74         qualifier  TOPDIO,         nonnegatable, placement=local
 75         qualifier  TOPBIO,         nonnegatable, placement=local
 76         qualifier  TOPFAULT,       nonnegatable, placement=local
 77
 78         qualifier  CPU,            placement=local
 79
 80         qualifier  PERCENT,        placement=local
 81
 82         qualifier  ITEM,           nonnegatable, placement=local
 83                                    value (list)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  |
 2  |   Version:     'V04-000'
 3  |
 4  |       V03-007 DAS0002        David Solomon           09-Jul-1984
 5  |           Add /[NO]REBUILD.
 6  |
 7  |       V03-006 HH0028         Hai Huang               27-Jun-1984
 8  |           Make appropriate qualifiers negatable.
 9  |
10  |       V03-005 HH0004         Hai Huang               09-Mar-1984
11  |           Add /CLUSTER qualifier.
12  |
13  |       V03-004 WMC0001        Wayne Cardoza           16-Jan-1984
14  |           Remove all journaling keywords.
15  |
16  |       V03-003 DAS0001        David Solomon           29-Nov-1983
17  |           Add RECORD_SIZE keyword for /JOURNAL qualifier.
18  |
19  |       V03-002 MCN0138        Maria del C. Nasr       12-Jul-1983
20  |           Make changes for new CLI interface.  Take out prefix
21  |           clause, which is no longer needed.  Add disallow clauses
22  |           for qualifiers that cannot go together.
23  |
24  |       V03-001 MMD0056        Meg Dumont              28-Mar-1983
25  |       Changed /OVERRIDE to inc OWNER_IDENTIFIER, added /AUTO and /INIT
26  |
27  |
28  define type cache_options
29      keyword extent,        value(required,type=$number),negatable
30      keyword file_id,       value(required,type=$number),negatable
31      keyword limit,         value(required,type=$number)
32      keyword quota,         value(required,type=$number),negatable
33      keyword writethrough
34
35  define type datacheck_options
36      keyword read
37      keyword write
38
39  define type initialize_options
40      keyword all
41      keyword continuation
42
43  !**JNL** define type journal_options
44  !**JNL**     keyword newfile
45  !**JNL**     keyword size,         value(required,type=$number)
46  !**JNL**     keyword extension,    value(required,type=$number)
47  !**JNL**     keyword quota,        value(required,type=$number)
48  !**JNL**     keyword RECORD_SIZE,  value(required,type=$number)
49
50  define type mount_overrides
51      keyword accessibility
52      keyword expiration
53      keyword identification, syntax=mount_wo_label
54      keyword setid
55      keyword lock
56      keyword owner_identifier
```

```
 57
 58   define type protection
 59         keyword system,value
 60         keyword group,value
 61         keyword owner,value
 62         keyword world,value
 63
 64   define syntax mount_wo_label
 65         parameter p1,prompt="Device",value(required,list,type=$device),label=devices
 66         parameter p2,prompt="Label",value(list),label=volumes
 67         parameter p3,prompt="Log name",value(type=$outlog),label=lognames
 68         disallow (<mount>foreign or <mount>nolabel) and (<mount>accessed or
 69                                                          <mount>automatic or
 70                                                          <mount>bind or
 71                                                          <mount>cache or
 72                                                          <mount>extension or
 73                                                          <mount>hdr3 or
 74                                                          <mount>initialize or
 75                                                          <mount>label or
 76                                                          <mount>processor or
 77                                                          <mount>quota or
 78                                                          <mount>rebuild or
 79                                                          <mount>windows)
 80         disallow (<mount>group or <mount>system) and <mount>share
 81         disallow <mount>system and <mount>group
 82
 83   define verb mount
 84         image vmount
 85         parameter p1,prompt="Device",value(required,list,type=$device),label=devices
 86         parameter p2,prompt="Label",value(required,list),label=volumes
 87         parameter p3,prompt="Log name",value(type=$outlog),label=lognames
 88         qualifier accessed,      value(required,type=$number)
 89         qualifier assist         default
 90         qualifier automatic      default
 91         qualifier bind,          value(required)
 92         qualifier blocksize,     value(required,type=$number)
 93         qualifier cache,         value(required,list,type=cache_options)
 94         qualifier cluster
 95         qualifier comment,       value(required)
 96         qualifier data_check,    value(list,type=datacheck_options)
 97         qualifier density,       value(required,type=$number)
 98         qualifier extension,     value(required,type=$number)
 99         qualifier foreign,       syntax=mount_wo_label,nonnegatable
100         qualifier group
101         qualifier hdr3,          default
102         qualifier initialize     value(required,type=initialize_options)
103 !**JNL**        qualifier journal        value(list,type=journal_options)
104 !
105 ! Due to some constraints in DCL and CLI parsing, the NOLABEL qualifier must
106 ! be defined explicitly in this CLD, and cannot be specified as the negation
107 ! of LABEL.  In that way we can use a different syntax for each one, and
108 ! also take advantage of the disallow clause.
109 !
110         qualifier label,         default,nonnegatable
111         qualifier nolabel,       nonnegatable,syntax=mount_wo_label
112         qualifier message        default
```

```
113          qualifier mount_verification    default
114          qualifier override,      value(required,list,type=mount_overrides)
115          qualifier owner_uic,     value(required,type=$uic)
116          qualifier processor,     value(required)
117          qualifier protection,    value(required,list,type=protection)
118          qualifier quota,         default
119          qualifier rebuild,       default
120          qualifier recordsize,    value(required,type=$number)
121          qualifier share
122          qualifier system
123          qualifier unload         default
124          qualifier windows,       value(required,type=$number)
125          qualifier write,         default
126          disallow (group or system) and share
127          disallow label and nolabel
128          disallow system and group
129
130  !
131  !  The following qualifiers have been commented out, since they were never
132  !  implemented.  They are not being coded with the new CLI interface, but
133  !  are included here for historical purposes.
134  !
135  !       qualifier drive,         value(required),
136  !                                placement=positional
137  !       qualifier ebcdic,        value(required,list)
138  !       qualifier interchange
139  !       qualifier user,          value(required,type=$uic)
140  !       qualifier visual,        value(required)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !
 2  !    Version:    'V04-000'
 3  !
 4  !        V03-004 MCN0180        Maria del C. Nasr        11-Jul-1984
 5  !                Make qualifiers negatable.
 6  !
 7  !        V03-003 PCG0001        Peter George             13-Mar-1984
 8  !                Remove OUTPUTS statement.
 9  !
10  !        V03-002 MTR0025        Mike Rhodes               9-Aug-1983
11  !                Add /ABSOLUTE qualifier, to allow patching non-image
12  !                files (eg. ISAM) at absolute (virtual) addresses.
13  !
14  !        V03-001 MTR0001        Mike Rhodes               9-Feb-1983
15  !                Add 'label' field to parameter specification.
16  !
17  define verb patch
18          image patch
19          parameter p1,label=file,prompt="File",value(required,type=$infile)
20          qualifier absolute
21          qualifier command,      value(type=$outfile)
22          qualifier journal,      value(type=$outfile),default
23          qualifier new_version,  default
24          qualifier output,       value(type=$outfile),default
25          qualifier update,       value(required,list)
26          qualifier volume,       value
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1    !
 2    !  Version:      'V04-000'
 3    !
 4    !
 5    define verb PHONE
 6          image phone
 7          parameter p1,label=token1,prompt="Command Token 1:"
 8          parameter p2,label=token2,prompt="Command Token 2:"
 9          parameter p3,label=token3,prompt="Command Token 3:"
10          parameter p4,label=token4,prompt="Command Token 4:"
11          qualifier SWITCH_HOOK,default,nonnegatable,value(default="X")
12          qualifier VIEWPORT_SIZE,default,nonnegatable,value(default="10")
13          qualifier SCROLL,default
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1    |
 2    |  Version:     'V04-000'
 3    |
 4
 5    define verb rename
 6          image rename
 7          parameter p1,prompt="From",value(required,list,impcat,type=$infile)
 8          parameter p2,prompt="To",value(required,type=$outfile)
 9          qualifier new_version,  default
10          qualifier before,       value(default=today,type=$datetime)
11          qualifier since,        value(default=today,type=$datetime)
12          qualifier created
13          qualifier modified
14          qualifier expired
15          qualifier backup
16          qualifier exclude,      value(required,list)
17          qualifier by_owner,     value(type=$uic)
18          qualifier confirm
19          qualifier log
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
  1   ! Version:    'V04-000'
  2   !
  3   !
  4
  5   define verb reply
  6       image reply
  7       parameter p1,prompt="Text"
  8
  9       qualifier abort                 value(required,type=$number)
 10       qualifier all
 11       qualifier bell
 12       qualifier blank_tape            value(required,type=$number)
 13       qualifier disable               value(list)
 14       qualifier enable                value(list)
 15       qualifier initialize_tape       value(required,type=$number)
 16       qualifier log
 17       qualifier node                  value(list)
 18       qualifier notify                default
 19       qualifier pending               value(required,type=$number)
 20       qualifier shutdown
 21       qualifier status
 22       qualifier temporary
 23       qualifier terminal              value(list,required)
 24       qualifier to                    value(required,type=$number)
 25       qualifier urgent
 26       qualifier username              value(list)
 27       qualifier wait
 28
 29       disallow (any2 (abort, all, blank_tape, disable, enable, initialize_tape,
 30                   log, pending, status, terminal, to, username))
 31       disallow (any2 (bell,
 32                   abort, blank_tape, disable, enable, initialize_tape,
 33                   log, pending, status, to))
 34       disallow (any2 (notify,
 35                   abort, blank_tape, disable, enable, initialize_tape,
 36                   log, pending, status, to))
 37       disallow (any2 (shutdown,
 38                   abort, blank_tape, disable, enable, initialize_tape,
 39                   log, pending, status, to))
 40       disallow (any2 (urgent,
 41                   abort, blank_tape, disable, enable, initialize_tape,
 42                   log, pending, status, to))
 43       disallow (any2 (wait,
 44                   abort, blank_tape, disable, enable, initialize_tape,
 45                   log, pending, status, to))
 46       disallow (shutdown and urgent)
 47       disallow (temporary and not enable)
 48
 49   define verb request
 50       image request
 51       parameter p1,prompt="Text"
 52       qualifier reply
 53       qualifier to                    value(required,list)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1      Version:    'V04-000'
 2
 3          V03-014 MCN0179         Maria del C. Nasr        9-Jul-1984
 4          Make /NOAUTHORIZE the default for RUNDET.
 5
 6          V03-013 WMC0007         Wayne Cardoza            16-Jan-1983
 7          Remove all CHKPNT stuff.
 8
 9          V03-012 WMC0006         Wayne Cardoza            14-Nov-1983
10          New qualifier for .CHK file name.
11
12          V03-011 TMK0001         Todd M. Katz             13-Nov-1983
13          Add the qualifier job_table_quota to the run verb. This
14          qualifier can be used to specify the job-wide logical
15          name table creation quota when creating a detached
16          process.
17
18          V03-010 WMC0005         Wayne Cardoza            10-Nov-1983
19          Allow checkpoint file name to be specified.
20
21          V03-009 WMC0004         Wayne Cardoza            28-Jul-1983
22          New checkpoint qualifier /WAIT
23
24          V03-008 MTR0002         Mike Rhodes              12-Jul-1983
25          Change /DELAY, /INTERVAL and /TIME_LIMIT qualifier
26          values to use the new "$deltatime" token identifier.
27          Correct the /PROCESS qualifiers to /PROCESS_NAME.
28
29          V03-007 WMC0003         Wayne Cardoza            21-Jun-983
30          Allow /DEBUG on RUN/CHECK
31
32          V03-006 RSH0026         R. Scott Hanna           24-May-1983
33          Add SECURITY privilege
34
35          V03-005 MTR0001         Mike Rhodes              23-May-1983
36          Add SHARE privilege keyword.
37
38          V03-004 PRB0175         Paul Beck               26-APR-1983 21:31:36
39          Add TMPJNL and PRMJNL
40
41          V03-003 WMC0002         Wayne Cardoza            14-Apr-1983
42          Parameter is /DETACHED
43
44          V03-002 WMC0001         Wayne Cardoza            13-Apr-1983
45          /DETACH, /DUMP qualifiers
46
47          V03-001 PCG0001         Peter George             13-Apr-1983
48          Create RUN.CLD.
49
50      define type privileges
51          keyword acnt,negatable
52          keyword allspool,negatable
53          keyword altpri,negatable
54          keyword bugchk,negatable
55          keyword bypass,negatable
56
```

```
57              keyword cmexec,negatable
58              keyword cmkrnl,negatable
59              keyword detach,negatable
60              keyword diagnose,negatable
61              keyword exquota,negatable
62              keyword group,negatable
63              keyword grpnam,negatable
64              keyword log_io,negatable
65              keyword mount,negatable
66              keyword netmbx,negatable
67              keyword oper,negatable
68              keyword pfnmap,negatable
69              keyword phy_io,negatable
70              keyword prmceb,negatable
71              keyword prmgbl,negatable
72              keyword prmjnl,negatable
73              keyword prmmbx,negatable
74              keyword pswapm,negatable
75              keyword same,negatable
76              keyword security,negatable
77              keyword setprv,negatable
78              keyword share,negatable
79              keyword shmem,negatable
80              keyword syslck,negatable
81              keyword sysgbl,negatable
82              keyword sysnam,negatable
83              keyword sysprv,negatable
84              keyword tmpjnl,negatable
85              keyword tmpmbx,negatable
86              keyword volpro,negatable
87              keyword world,negatable
88
89   !**JNL** define syntax run_checkpoint
90   !**JNL**         image    chkpntcmd
91   !**JNL**         parameter p1,prompt="File",value(required,type=$infile)
92   !**JNL**         qualifier error,         value(required,type=$outfile)
93   !**JNL**         qualifier input,         value(required,type=$outfile)
94   !**JNL**         qualifier output,        value(required,type=$outfile)
95   !**JNL**         qualifier priority,      value(required)
96   !**JNL**         qualifier privileges,    value(required,list,type=privileges)
97   !**JNL**         qualifier process_name,  value(required)
98   !**JNL**         qualifier resource_wait,default
99   !**JNL**         qualifier service_failure
100  !**JNL**         qualifier swapping,      default
101  !**JNL**         qualifier uic,           value(required,type=$uic)
102  !**JNL**         qualifier accounting,    default
103  !**JNL**         qualifier buffer_limit,  value(required)
104  !**JNL**         qualifier time_limit,    value(required, type=$deltatime)
105  !**JNL**         qualifier file_limit,    value(required)
106  !**JNL**         qualifier page_file,     value(required)
107  !**JNL**         qualifier queue_limit,   value(required)
108  !**JNL**         qualifier subprocess_limit,value(required)
109  !**JNL**         qualifier maximum_working_set,value(required)
110  !**JNL**         qualifier working_set,   value(required)
111  !**JNL**         qualifier authorize,     default
112  !**JNL**         qualifier ast_limit,     value(required)
```

```
113   !**JNL**        qualifier io_buffered,  value(required)
114   !**JNL**        qualifier io_direct,    value(required)
115   !**JNL**        qualifier enqueue_limit,value(required)
116   !**JNL**        qualifier extent,       value(required)
117   !**JNL**        qualifier auto_restart
118   !**JNL**        qualifier paging_file,  value(required,type=$outfile)
119   !**JNL**        qualifier detached
120   !**JNL**        qualifier dump
121   !**JNL**        qualifier debug
122   !**JNL**        qualifier wait,         default
123   !**JNL**        qualifier chk_file,     value(required,type=$outfile)
124
125   !**JNL** define syntax run_restart
126   !**JNL**        image   chkrstcmd
127   !**JNL**        parameter p1,prompt="File",value(required,type=$infile)
128   !**JNL**        qualifier error,        value(required,type=$outfile)
129   !**JNL**        qualifier input,        value(required,type=$outfile)
130   !**JNL**        qualifier output,       value(required,type=$outfile)
131   !**JNL**        qualifier priority,     value(required)
132   !**JNL**        qualifier privileges,   value(required,list,type=privileges)
133   !**JNL**        qualifier process_name, value(required)
134   !**JNL**        qualifier resource_wait,default
135   !**JNL**        qualifier service_failure
136   !**JNL**        qualifier swapping,     default
137   !**JNL**        qualifier uic,          value(required,type=$uic)
138   !**JNL**        qualifier accounting,   default
139   !**JNL**        qualifier buffer_limit, value(required)
140   !**JNL**        qualifier time_limit,   value(required, type=$deltatime)
141   !**JNL**        qualifier file_limit,   value(required)
142   !**JNL**        qualifier page_file,    value(required)
143   !**JNL**        qualifier queue_limit,  value(required)
144   !**JNL**        qualifier subprocess_limit,value(required)
145   !**JNL**        qualifier maximum_working_set,value(required)
146   !**JNL**        qualifier working_set,  value(required)
147   !**JNL**        qualifier authorize,    default
148   !**JNL**        qualifier ast_limit,    value(required)
149   !**JNL**        qualifier io_buffered,  value(required)
150   !**JNL**        qualifier io_direct,    value(required)
151   !**JNL**        qualifier enqueue_limit,value(required)
152   !**JNL**        qualifier extent,       value(required)
153   !**JNL**        qualifier auto_restart
154   !**JNL**        qualifier dump
155   !**JNL**        qualifier debug
156   !**JNL**        qualifier wait,         default
157
158   define syntax run_process
159        image rundet
160
161   define verb run
162        synonym r
163        synonym ru
164        cliroutine run
165        cliflags(abbreviate)
166        prefix cli$k_run_
167        parameter p1,prompt="File",value(required,type=$infile)
168   !**JNL**        qualifier checkpoint,   syntax=run_checkpoint
```

```
169    !**JNL**     qualifier restart,         syntax=run_restart
170         qualifier delay,         value(required, type=$deltatime),
171                                  syntax=run_process
172         qualifier error,         value(required,type=$outfile),
173                                  syntax=run_process
174         qualifier input,         value(required,type=$outfile),
175                                  syntax=run_process
176         qualifier interval,      value(required, type=$deltatime),
177                                  syntax=run_process
178         qualifier output,        value(required,type=$outfile),
179                                  syntax=run_process
180         qualifier priority,      value(required),
181                                  syntax=run_process
182         qualifier privileges,    value(required,list,type=privileges),
183                                  syntax=run_process
184         qualifier process_name,  value(required),
185                                  syntax=run_process
186         qualifier resource_wait,default,syntax=run_process
187         qualifier schedule,      value(required,type=$datetime),
188                                  syntax=run_process
189         qualifier service_failure,syntax=run_process
190         qualifier swapping,      default,syntax=run_process
191         qualifier uic,           value(required,type=$uic),
192                                  syntax=run_process
193         qualifier accounting,    default,syntax=run_process
194         qualifier buffer_limit,  value(required),syntax=run_process
195         qualifier time_limit,    value(required, type=$deltatime),syntax=run_process
196         qualifier file_limit,    value(required),syntax=run_process
197         qualifier page_file,     value(required),syntax=run_process
198         qualifier queue_limit,   value(required),syntax=run_process
199         qualifier subprocess_limit,value(required),syntax=run_process
200         qualifier maximum_working_set,value(required),syntax=run_process
201         qualifier working_set,   value(required),syntax=run_process
202         qualifier debug
203         qualifier authorize,     syntax=run_process
204         qualifier mailbox,       value(required),syntax=run_process
205         qualifier ast_limit,     value(required),syntax=run_process
206         qualifier io_buffered,   value(required),syntax=run_process
207         qualifier io_direct,     value(required),syntax=run_process
208         qualifier enqueue_limit,value(required),syntax=run_process
209         qualifier extent,        value(required),syntax=run_process
210         qualifier detached,      syntax=run_process
211         qualifier dump,          syntax=run_process
212         qualifier job_table_quota,value(required),syntax=run_process
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !
 2  !   Version:    'V04-000'
 3  !
 4  !   14 February 1984
 5  !   Command-line description file for RUNOFF
 6
 7  define type contents_page_options
 8      keyword  running,          negatable
 9      keyword  level,            value(required, type=$number)
10
11  define type index_page_options
12      keyword  running,          negatable
13
14  define syntax RUN_CONTENTS
15      image  DSRTOC
16      parameter  p1,             label=input, prompt="File", value(required, list, type=$infile)
17      qualifier  bold
18      qualifier  deepest_header,       value(required, type=$number), nonnegatable
19      qualifier  identification
20      qualifier  indent
21      qualifier  log
22      qualifier  output,               value(type=$outfile), default
23      qualifier  page_numbers,   value(required, list, type=contents_page_options), nonnegatable
24      qualifier  require,              value(required, type=$infile)
25      qualifier  section_numbers
26      qualifier  underline
27
28  define syntax RUN_INDEX
29      image  DSRINDEX
30      parameter  p1,             label=input, prompt="File", value(required, list, type=$infile)
31      qualifier  identification
32      qualifier  lines_per_page,       value(required, type=$number), nonnegatable
33      qualifier  log
34      qualifier  output,               value(type=$outfile), default
35      qualifier  page_numbers,   value(list, type=index_page_options), default
36      qualifier  require,              value(required, type=$infile)
37      qualifier  reserve,              value(required, type=$number)
38
39  define type debug_options
40      keyword  all,              default
41      keyword  conditionals
42      keyword  contents
43      keyword  files
44      keyword  index
45
46  define type message_options
47      keyword  output
48      keyword  user
49
50  define verb RUNOFF
51      image  RUNOFF
52      parameter  p1,             label=p1, prompt="File", value(required, list, type=$infile)
53      qualifier  backspace       placement=positional, nonnegatable
54      qualifier  bold,           value(default=1, type=$number), default, placement=positional
55      qualifier  change_bars,    value(default="!"), placement=positional
56      qualifier  contents,       syntax=run_contents
```

```
57        qualifier debug,            value(list, type=debug_options, default=ALL), placement=positional
58        qualifier dec_internal,     value(list), placement=positional, nonnegatable
59        qualifier device,                value(required, list), placement=positional, nonnegatable
60        qualifier down,             value(default=5, type=$number), placement=positional
61        qualifier form_size,        value(required, type=$number), nonnegatable
62        qualifier index,            syntax=run_index
63        qualifier intermediate,     value(type=$outfile), placement=positional
64        qualifier log
65        qualifier messages,         value(required, type=message_options, list), placement=positional, nonnegatable
66        qualifier output,                value(type=$outfile), placement=positional
67        qualifier overprint,        default, placement=positional, nonnegatable
68        qualifier pages,            value(required), placement=positional, nonnegatable
69        qualifier pause
70        qualifier right,            value(default=5, type=$number), placement=positional
71        qualifier sequence                     placement=positional
72        qualifier simulate
73        qualifier underline_character,  value(default=" "), default, placement=positional
74        qualifier separate_underline,   value(default="="), placement=positional, nonnegatable
75        qualifier nonspacing_underline, value(default=""), placement=positional, nonnegatable
76        qualifier variant,              value, placement=positional, nonnegatable
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1   |  Version:    'V04-000'
 2   |
 3   |
 4
 5   define syntax NOPARSE
 6           image SDLNPARSE
 7   define verb SDL,
 8           image SDL,
 9           parameter p1, prompt="File",label=infile,value (required,list)
10           qualifier LANGUAGES, value (required,list),placement=positional
11           qualifier LIST, value,placement=positional
12           qualifier DUMP, placement=positional,value
13           qualifier PARSE, default,placement=positional,value
14           qualifier NOPARSE, syntax=noparse
15           qualifier HEADER, default,placement=positional
16           qualifier COPYRIGHT, placement=positional,value
17           qualifier COMMENTS,default, placement=positional,value
18           qualifier NOCOMMENTS, placement=positional,value
19           qualifier GLOBAL DEFINITION, placement=positional,value
20           qualifier VMS_DEVELOPMENT, placement=positional,value
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1    !
 2    ! Version:    'V04-000'
 3    !
 4
 5    define type search_matches
 6          keyword and
 7          keyword or,default
 8          keyword nand
 9          keyword nor
10
11    define type search_formats
12          keyword passall
13          keyword text,default
14          keyword dump
15          keyword nonulls
16
17    define verb search
18          image search
19          parameter p1,prompt="filename(s)",value(required,list,type=$infile),
20                    label=source
21          parameter p2,prompt="String(s)",value(required,list),label=string
22          qualifier exact
23          qualifier exclude,value(required,list),nonnegatable
24          qualifier format,value(type=search_formats,default=TEXT),
25                    default,nonnegatable
26          qualifier heading,default
27          qualifier log
28          qualifier match,value(type=search_matches,default=OR),
29                    default,nonnegatable
30          qualifier numbers
31          qualifier output,value(default=SYS$OUTPUT,type=$outfile),default
32          qualifier remaining
33          qualifier statistics
34          qualifier window,value(default=5,list)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  │ Don't forget the MCRSET.CLD file.  It contains an equivalent set of
 2  │ definitions for MCR which should also be enhanced.
 3  │
 4  │ Version:     'V04-000'
 5  │
 6  │ Edit History:
 7  │
 8  │     V03-086 JAK0226        J A Krycka      16-Aug-1984
 9  │             Change /OWNER to /OWNER_UIC on SET QUEUE for consistency with
10  │             other commands.
11  │
12  │     V03-085 AEW0004        Anne E. Warner          02-Aug-1984
13  │             Take out /WRITE and /CONTROLLER qualifiers from
14  │             SET DEVICE/SERVED again since the code has been fixed to
15  │             accept this behavior.
16  │
17  │     V03-084 CWH3084        CW Hobbs                29-Jul-1984
18  │             Restore /WRITE and /CONTROLLER qualifiers to SET DEV /SERV
19  │
20  │     V03-083 CWH3083        CW Hobbs                27-Jul-1984
21  │             Comment out disallow references to /WRITE and /CONTROLLER
22  │             in SET DEVICE /SERVED
23  │
24  │     V03-082 AEW0003        Anne E. Warner          25-Jul-1984
25  │             1.  Take $DELTATIME value out of SET VOLUME/RETENTION.
26  │                 This was added in V03-073.
27  │             2.  Comment out the qualifiers /[NO]WRITE and /CONTROLLER
28  │                 in SET DEVICE/SERVED.
29  │             3.  Make SYNTAX= qualifiers nonnegatable throughout SET.
30  │             4.  Make qualifiers negatable in SET:
31  │                         ACCOUNTING              PASSWORD
32  │                         CARD_READER             PROCESS
33  │                         DAYTIME                 PROTECTION
34  │                         DEVICE                  RMS_DEFAULT
35  │                         DIRECTORY               VOLUME
36  │                         FILE                    WORKING_SET
37  │                         LOGINS
38  │                         MESSAGE
39  │                         MAGTAPE
40  │     V03-081 JAK0220        J A Krycka              12-Jul-1984
41  │             Add [NO]FEED option to the /DEFAULT qualifier.
42  │
43  │     V03-080 DAS0003        David Solomon           09-Jul-1984
44  │             Add SET VOLUME/REBUILD.
45  │
46  │     V03-079 LMP0260        L. Mark Pilant,         25-Jun-1984  14:08
47  │             Add a qualifier, /DEFAULT, to be used with SET ACL/LIKE to
48  │             only copy default option ACEs.
49  │
50  │     V03-078 JLV0354        Jake VanNoy             12-APR-1984
51  │             Add SET HOST/DTE/DIAL
52  │
53  │     V03-077 ROW0349        Ralph O. Weber          12-APR-1984
54  │             Add SET DEVICE/[NO]DIAGNOSTIC.
55  │             Add SET HOST/HSC with executed image HSCPAD.
56  │             Add SET PRINTER /FORM_UNIT /TRUNCATE /TAB /SIXELS /BITMAPPED
```

```
57  |        for Elliott.
58  |
59  | V03-076 PCG0019        Peter George           30-Mar-1984
60  |        Add SET RMS/NETWORK_BLOCK_COUNT.
61  |        Add SET DEVICE/SERVED/NOWRITE/CONTROLLER.
62  |        Add /LOG qualifier to SET TERM/X29.
63  |        Require SET TERM/X29/HOLD_TIMER to have a value.
64  |        Make the PSISETX29_ACTION keywords negatable.
65  |
66  | V03-075 LMP0217        L. Mark Pilant,        24-Mar-1984 22:22
67  |        Change all references to SETACL to be SETSHOACL.
68  |
69  | V03-074 BLS0291        Benn Schreiber         24-MAR-1984
70  |        SET PASSWORD is now in SETP0
71  |
72  | V03-073 PCG0018        Peter George           15-Mar-1984
73  |        Remove unnecessary PREFIX statements.
74  |        Specify SET VOL/RETENTION takes delta time values.
75  |
76  | V03-072 HWS0030        Harold Schultz         14-Mar-1984
77  |        Fix HWS0024
78  |
79  | V03-071 PRB0322        Paul Beck              11-MAR-1984 13:17
80  |        Add SET CLUSTER /QUORUM
81  |
82  | V03-070 LMP0210        L. Mark Pilant,        9-Mar-1984  13:46
83  |        Change the /MODIFY qualifier on the various SET xxx/ACL
84  |        commands to be /REPLACE.
85  |
86  | V03-069 HWS0024        Harold Schultz         09-Mar-1984
87  |        Remove NETWORK_SPECIFIC keyword and add /PERMANENT
88  |        qualifier to SET TERM/X29 command.
89  |
90  | V03-068 PLL0001        Pamela Levesque        07-Mar-1984
91  |        Remove terminal definitions from SET TERM/DEVICE.
92  |        (to allow termtable defined terminals)
93  |
94  | V03-067 SHZ0003        Stephen H. Zalewski,   06-Mar-1984
95  |        Disallow SET PASSWORD/SYSTEM/SECONDARY.
96  |
97  | V03-066 HWS0018        Harold Schultz         06-Mar-1984
98  |        Integrate in SET HOST/X29, SET TERM/X29 and associated
99  |        qualifiers.
100 |
101 | V03-065 EMD0057        Ellen M. Dusseault     02-Mar-1984
102 |        Add new terminal device name, PRO_SERIES for SET
103 |        TERMINAL/DEVICE=
104 |
105 | V03-064 EMD0052        Ellen M. Dusseault     28-Feb-1984
106 |        Allow SET TERMINAL qualifier, DEC_CRT to have a value
107 |        and also a list of elements.
108 |
109 | V03-063 MCN0154        Maria del C. Nasr      27-Feb-1984
110 |        Add DETACHED, SUPROCESS as keywords to /ENABLE in
111 |        SET ACCOUNTING.
112 |
```

```
113  |    V03-062 RSH0106        R. Scott Hanna         24-Feb-1984
114  |            Fix field test 1 problems with SET AUDIT.
115  |
116  |    V03-061 PCG0017        Peter George           14-Feb-1984
117  |            Change behavior of queue parameter, /BLOCK_LIMIT
118  |            qualifier, and /PAGE qualifier to SET QUEUE.
119  |
120  |    V03-060 SHZ0002        Stephen H. Zalewski    13-Feb-1984
121  |            Add SET PASSWORD/SECONDARY.
122  |
123  |    V03-059 DAS0002        David Solomon          6-Feb-1984
124  |            Remove /JOURNAL keyword from SET FILE and SET AUDIT.
125  |
126  |    V03-058 LMP0185        L. Mark Pilant,        3-Feb-1984  19:54
127  |            Add a support for a SET DEVICE/ACL command.
128  |
129  |    V03-057 LMP0185        L. Mark Pilant,        1-Feb-1984  12:18
130  |            Add support for device ACLs.
131  |
132  |    V03-053 MCN0146        Maria del C. Nasr      1-Feb-1984
133  |            Add MESSAGE keyword to /ENABLE for SET ACCOUNTING
134  |
135  |    V03-052 MMD0230        Meg Dumont             1-Feb-1984
136  |            Add /PROTOCOL and values to SET TERMINAL
137  |
138  |    V03-051 EMD0042        Ellen M. Dusseault     31-Feb-1984
139  |            add /FALLBACK to SET PRINTER
140  |
141  |    V03-050 SHZ0001        Stephen H. Zalewski    03-Jan-1984
142  |            add /GENERATE to SET PASSWORD.
143  |
144  |      V03-049 AEW0002        Anne Warner            15-Dec-1983
145  |              Add /PROTECTION to SET FILE
146  |
147  |      V03-048 AEW0001        Anne Warner            08-Nov-1983
148  |              Add /UNLOCK to SET FILE
149  |
150  |    V03-047 GAS0175        Gerry Smith            30-Aug-1983
151  |            Add SET BROADCAST.
152  |
153  |    V03-046 PCG0016        Peter George           25-Aug-1983
154  |            Add SET HOST/SNA /CHARACTER_SET qualifier.
155  |
156  |    V03-045 MIR0083        Michael I. Rosenblum   23-Aug-1983
157  |            Add SYSPASSWORD to set terminal.
158  |
159  |    V03-044 BLS0232        Benn Schreiber         5-Aug-1983
160  |            Add SET TERM/PASTHRU, which was omitted
161  |
162  |    V03-043 MLJ0043        Martin L. Jack         29-Jul-1983
163  |            Enhance SET QUEUE.
164  |
165  |    V03-042 GAS0153        Gerry Smith            27-Jul-1983
166  |            Add SET AUDIT.
167  |
168  |    V03-041 PCG0015        Peter George           27-Jul-1983
```

```
169  !          Add SET HOST/BTS
170  !
171  !   V03-040 PCG0015        Peter George        21-Jun-1983
172  !          Change $PARENTHESIZED_VALUE to $ACL.
173  !
174  !   V03-039 PCG0014        Peter George        21-Jun-1983
175  !          Put $DELTATIME back in SET OUTPUT_RATE.
176  !
177  !   V03-038 GAS0139        Gerry Smith         17-Jun-1983
178  !          Add SET PASSWORD/SYSTEM.
179  !
180  !   V03-037 JLV0271        Jake VanNoy         14-JUN-1983
181  !          Add SET HOST/LOG=output_file
182  !
183  !   V03-036 PCG0013        Peter George        31-May-1983
184  !          Make SET OUTPUT_RATE work in build.
185  !
186  !   V03-035 MLJ0035        Martin L. Jack      27-May-1983
187  !          Change set host/old default.
188  !
189  !   V03-034 JLV0256        Jake VanNoy         26-May-1983
190  !          Change set host/old default.
191  !
192  !   V03-033 RSH0027        R. Scott Hanna      24-May-1983
193  !          Add SECURITY privilege
194  !
195  !   V03-032 LMP0117        L. Mark Pilant,     19-May-1983 10:48
196  !          Add the new command SET FILE/ACL.
197  !
198  !   V03-031 GAS0132        Gerry Smith         19-May-1983
199  !          Add HIGHWATER, ERASE_ON_DELETE, UNLOAD, and
200  !          MOUNT_VERIFICATION to SET VOLUME.  Also remove the
201  !          defaults for SET MESSAGE, since it makes more sense
202  !          to change the documentation than the way SET MESS works.
203  !
204  !   V03-030 PCG0012        Peter George        03-May-1983
205  !          Add SET OUTPUT_RATE, SET VERIFY=(PROCEDURE,IMAGE)
206  !
207  !   V03-029 PCG0011        Peter George        30-Apr-1983
208  !          Change SET PROMPT/CONTROL to /CARRIAGE_CONTROL.
209  !
210  !   V03-028 MIR0042        Michael I. Rosenblum 29-Apr-1983
211  !          Move importaint information to the top of the module
212  !
213  !   V03-027 MLJ0027        Martin L. Jack      27-Apr-1983
214  !          Changes for new QUEMAN image.
215  !
216  !   V03-026 GAS0127        Gerry Smith         27-Apr-1983
217  !          Make SET MESSAGE default to /FAC/ID/SEV/TEXT.
218  !
219  !   V03-025 KPL0001        Peter Lieberwirth   27-Apr-1983
220  !          Add qualifiers AI_JOURNAL, AT_JOURNAL, and BI_JOURNAL
221  !          to SET FILE to permit specification of journal names.
222  !          Remove EXPIRED qualifier from SET FILE for Gerry.
223  !
224  !   V03-024 PRB0175        Paul Beck          27-APR-1983 10:36:50
```

```
225                     Add privileges TMPJNL and PRMJNL.
226
227     V03-023 MIR0035         Michael I. Rosenblum 18-Apr-1983
228                     Add qualifiers DISMISS_PARITY, APPLICATIONS, NUMERIC
229                     FRAME, add Vt200 support and associated qualifiers.
230
231     V03-022 PCG0010         Peter George    13-Apr-1983
232                     Add SET RESTART_VALUE.
233
234     V03-021 GAS0116         Gerry Smith     12-Apr-1983
235                     Add common qualifiers to SET FILE, SET DIRECTORY
236
237     V03-020 WMC0020         Wayne Cardoza   11-Apr-1983
238                     Add SET PROC/DUMP
239
240     V03-019 GAS0112         Gerry Smith     29-Mar-1983
241                     Add labels for the parts of set which are being
242                     converted to the new CLI interface.
243
244     V03-018 PCG0009         Peter George    28-Mar-1983
245                     Add SET KEY.
246                     Delete MCR-specific statements.
247
248     V03-017 PCA1008         Paul C. Anagnostopoulos 25-Mar-1983
249                     Replace definition of SET COMMAND for new CDU.
250                     Make all necessary changes for new CDU.
251
252     V03-016 GAS0106         Gerry Smith     12-Mar-1983
253                     Add five new privileges, as well as /LOG to
254                     many new SET options.
255
256     V03-015 MLJ0015         Martin L. Jack  01-Mar-1983
257                     Changes for new QUEMAN image.
258
259     V03-014 PCA1008         Paul C. Anagnostopoulos 11 Feb 1983
260                     Add a comment about the equivalent CLD for MCR.
261
262     V03-013 JLV0229         Jake VanNoy     11-Feb-1983
263                     Add temporary /OLD to SET HOST as a means of using
264                     either protocol to remote node.
265
266     V03-012 PCA1008         Paul C. Anagnostopoulos 10 Feb 1983
267                     Remove MCRIGNORE flag from SET_PROMPT syntax definition, as
268                     the new CDU won't support it.
269
270     V03-011 GAS0105         Gerry Smith     27-Jan-1983
271                     Add /LOG qualifier.
272
273     V03-010 MLJ0010         Martin L. Jack  01-Jan-1983
274                     Changes for new QUEMAN image.
275
276     V03-009 PCG0008         Peter George    19-Nov-1982
277                     Correct placement of PROMPT keyword.
278
279     V03-008 PCG0007         Peter George    14-Nov-1982
280                     Set MCRIGNORE flag for SET PROMPT.
```

```
281  |
282  |     V03-007 PCG0006        Peter George    29-Oct-1982
283  |             Add SET PROMPT. Fix SET TIME.
284  |
285  |     V03-006 PCG0005        Peter George    21-Oct-1982
286  |             Make SET PROTECTION work.
287  |
288  |     V03-005 DWT0061        David Thiel     20-Oct-1982
289  |             Use keywords for value of /CLI qualifier
290  |
291  |     V03-004 PCG0004        Peter George    19-Oct-1982
292  |             Correct spelling of SET CONTROL_Y keyword.
293  |             Copy previous parameter definitions into each
294  |             DEFINE SYNTAX statement.
295  |
296  |     V03-003 PCG0003        Peter George    06-Oct-1982
297  |             Correct placement of /PROTECTION and /DEFAULT
298  |             qualifiers to SET PROTECTION.  Put mcroptdelim
299  |             flag into cliflags construct.
300  |
301  |     V03-002 PCG0002        Peter George    03-Aug-1982
302  |             Add SET HOST/SNA
303  |
304  |     V03-001 PCG0001        Peter George    15-Jul-1982
305  |             Allow negated privileges
306  |
307  define type file_access_types
308       keyword all
309       keyword control
310       keyword delete
311       keyword execute
312       keyword read
313       keyword write
314
315  define type file_audit_types
316       keyword all
317       keyword bypass,        value(list,default=all,type=file_access_types)
318       keyword downgrade,     value(list,default=all,type=file_access_types)
319       keyword failure,       value(list,default=all,type=file_access_types)
320       keyword grpprv,        value(list,default=all,type=file_access_types)
321       keyword readall,       value(list,default=all,type=file_access_types)
322       keyword success,       value(list,default=all,type=file_access_types)
323       keyword sysprv,        value(list,default=all,type=file_access_types)
324       keyword upgrade,       value(list,default=all,type=file_access_types)
325
326  define type breakin_types
327       keyword all
328       keyword detached
329       keyword dialup
330       keyword local
331       keyword network
332       keyword remote
333
334  define type loginout_types
335       keyword all
336       keyword batch
```

```
337            keyword detached
338            keyword dialup
339            keyword local
340            keyword network
341            keyword remote
342            keyword subprocess
343
344    define type audit_types
345            keyword acl
346            keyword all
347            keyword authorization
348            keyword file_access,       value(required,list,type=file_audit_types)
349            keyword breakin,           value(required,list,type=breakin_types)
350            keyword logfailure,        value(required,list,type=loginout_types)
351            keyword login,             value(required,list,type=loginout_types)
352            keyword logout,            value(required,list,type=loginout_types)
353            keyword mount
354
355    define type keep_file
356            keyword recovery
357            keyword journal
358
359    define type mode_types
360            keyword prompt,            default,negatable
361
362    define type acl_objects
363            keyword file
364            keyword device
365            keyword queue
366            keyword event_cluster
367            keyword logical_name_table
368            keyword process
369            keyword global_section
370
371    define type skiptypes
372            keyword end_of_tape
373            keyword files,value
374            keyword blocks,value
375            keyword records,value
376
377    define type print_bft
378            keyword all,default
379            keyword one
380
381    define type defaults
382            keyword burst,negatable,value(type=print_bft)
383            keyword feed,negatable
384            keyword flag,negatable,value(type=print_bft)
385            keyword trailer,negatable,value(type=print_bft)
386
387    define type retain
388            keyword all,default
389            keyword error
390
391    define type protection
392            keyword system,value
```

```
393              keyword group,value
394              keyword owner,value
395              keyword world,value
396
397     define type control_keys
398              keyword t
399              keyword y
400
401     define type verify_keys
402              keyword procedure,negatable
403              keyword image,negatable
404
405     define type privileges
406              keyword acnt,negatable
407              keyword allspool,negatable
408              keyword altpri,negatable
409              keyword bugchk,negatable
410              keyword bypass,negatable
411              keyword cmexec,negatable
412              keyword cmkrnl,negatable
413              keyword detach,negatable
414              keyword diagnose,negatable
415              keyword downgrade,negatable
416              keyword exquota,negatable
417              keyword group,negatable
418              keyword grpnam,negatable
419              keyword grpprv,negatable
420              keyword log_io,negatable
421              keyword mount,negatable
422              keyword netmbx,negatable
423              keyword oper,negatable
424              keyword pfnmap,negatable
425              keyword phy_io,negatable
426              keyword prmceb,negatable
427              keyword prmgbl,negatable
428              keyword prmjnl,negatable
429              keyword prmmbx,negatable
430              keyword pswapm,negatable
431              keyword readall,negatable
432              keyword same,negatable
433              keyword security,negatable
434              keyword setprv,negatable
435              keyword share,negatable
436              keyword shmem,negatable
437              keyword syslck,negatable
438              keyword sysgbl,negatable
439              keyword sysnam,negatable
440              keyword sysprv,negatable
441              keyword tmpjnl,negatable
442              keyword tmpmbx,negatable
443              keyword upgrade,negatable
444              keyword volpro,negatable
445              keyword world,negatable
446
447     define type accounting_types
448              keyword batch
```

```
449            keyword interactive
450            keyword login_failure
451            keyword print
452            keyword process
453            keyword network
454            keyword image
455            keyword message
456            keyword detached
457            keyword subprocess
458
459    define type brdcst_types
460            keyword all
461            keyword none
462            keyword general,negatable
463            keyword phone,negatable
464            keyword mail,negatable
465            keyword queue,negatable
466            keyword shutdown,negatable
467            keyword urgent,negatable
468            keyword dcl,negatable
469            keyword opcom,negatable
470            keyword user1,negatable
471            keyword user2,negatable
472            keyword user3,negatable
473            keyword user4,negatable
474            keyword user5,negatable
475            keyword user6,negatable
476            keyword user7,negatable
477            keyword user8,negatable
478            keyword user9,negatable
479            keyword user10,negatable
480            keyword user11,negatable
481            keyword user12,negatable
482            keyword user13,negatable
483            keyword user14,negatable
484            keyword user15,negatable
485            keyword user16,negatable
486
487    define type journal_keywords
488            keyword ai,negatable,value
489            keyword at,negatable,value
490            keyword bi,negatable,value
491            keyword never_ru,negatable
492            keyword only_ru,negatable
493            keyword ru,negatable
494
495    define type schedule
496            keyword size,negatable
497
498    define type separate
499            keyword burst,negatable
500            keyword flag,negatable
501            keyword reset,negatable,value(required,list)
502            keyword trailer,negatable
503
504    define type protocol_types
```

```
505         keyword none
506         keyword ddcmp
507
508   define      type    psisetx29_int_brk
509         keyword action  negatable,value(type=psisetx29_action,required,list)
510                         label=psisetx29_action
511         keyword string  negatable,value(required),label=psisetx29_string
512
513   define      type    psisetx29_action
514         keyword purge   negatable,label=psisetx29_purge
515         keyword reset   negatable,label=psisetx29_reset
516         keyword clear   negatable,label=psisetx29_clear
517
518   define      type x29_param_type
519         keyword break,              label=x29_break,negatable,
520                                     value(type=$number,default=1)
521         keyword 7,                  label=x29_break_n,
522                                     value(required,type=$number)
523         keyword crfill,             label=x29_crfill,negatable,
524                                     value(type=$number,default=1)
525         keyword 9,                  label=x29_crfill_n,
526                                     value(required,type=$number)
527         keyword delete,             label=x29_delete,negatable,
528                                     value(type=$number,default=1)
529         keyword 16,                 label=x29_delete_n,
530                                     value(required,type=$number)
531         keyword discard_output,     label=x29_discard_output,negatable,
532                                     value(type=$number,default=1)
533         keyword 8,                  label=x29_discard_output_n,
534                                     value(required,type=$number)
535         keyword echo,               label=x29_echo,negatable,
536                                     value(type=$number,default=1)
537         keyword 2,                  label=x29_echo_n,
538                                     value(required,type=$number)
539         keyword edit,               label=x29_edit,negatable,
540                                     value(type=$number,default=1)
541         keyword 15,                 label=x29_edit_n,
542                                     value(required,type=$number)
543         keyword escape_character,   label=x29_escape,negatable,
544                                     value(type=$number,default=1)
545         keyword 1,                  label=x29_escape_n,
546                                     value(required,type=$number)
547         keyword forwarding_characters, label=x29_forwarding,negatable,
548                                     value(type=$number,default=1)
549         keyword 3,                  label=x29_forwarding_n,
550                                     value(required,type=$number)
551         keyword hostsync,           label=x29_hostsync,negatable,
552                                     value(type=$number,default=1)
553         keyword 5,                  label=x29_hostsync_n,
554                                     value(required,type=$number)
555         keyword lffill,             label=x29_lffill,negatable,
556                                     value(type=$number,default=1)
557         keyword 14,                 label=x29_lffill_n,
558                                     value(required,type=$number)
559         keyword line_delete,        label=x29_line_delete,negatable,
560                                     value(type=$number,default=1)
```

```
561          keyword 17,                label=x29_line_delete_n,
562                                     value(required,type=$number)
563          keyword messages,         label=x29_messages,negatable,
564                                     value(type=$number,default=1)
565          keyword 6,                label=x29_messages_n,
566                                     value(required,type=$number)
567          keyword new_line,         label=x29_new_line,negatable,
568                                     value(type=$number,default=1)
569          keyword 13,               label=x29_new_line_n,
570                                     value(required,type=$number)
571          keyword redisplay_line,   label=x29_redisplay_line,negatable,
572                                     value(type=$number,default=1)
573          keyword 18,               label=x29_redisplay_line_n,
574                                     value(required,type=$number)
575          keyword speed,            label=x29_speed,negatable,
576                                     value(type=$number,default=1)
577          keyword 11,               label=x29_speed_n,
578                                     value(required,type=$number)
579          keyword timeout,          label=x29_timeout,negatable,
580                                     value(type=$number,default=1)
581          keyword 4,                label=x29_timeout_n,
582                                     value(required,type=$number)
583          keyword ttsync,           label=x29_ttsync,negatable,
584                                     value(type=$number,default=1)
585          keyword 12,               label=x29_ttsync_n,
586                                     value(required,type=$number)
587          keyword wrap,             label=x29_wrap,negatable,
588                                     value(type=$number,default=1)
589          keyword 10,               label=x29_wrap_n,
590                                     value(required,type=$number)
591
592  define syntax acledit
593          image acledt
594          parameter p1,label=option,value(required)
595          parameter p2,prompt="Object Name",value(required,type=$infile),label=input
596          qualifier journal,        default,value(type=$infile)
597          qualifier recover,        value(type=$infile)
598          qualifier keep,           value(list,type=keep_file)
599          qualifier mode,           default,value(type=mode_types)
600          qualifier object_type,    value(type=acl_objects)
601
602  define syntax set_accounting
603          parameter p1,label=option,value(required)
604          qualifier disable,        value(list,type=accounting_types)
605          qualifier enable,         value(list,type=accounting_types)
606          qualifier new_file
607          qualifier log
608
609  define syntax set_acl
610          image setshoacl
611          parameter p1,label=option,value(required)
612          parameter p2,prompt="Object",value(required),label=input
613          qualifier acl,            value(list,type=$acl)
614          qualifier after,          value(required,type=$acl)
615          qualifier backup
616          qualifier before,         value(default=today)
```

```
617            qualifier by_owner,     value(type=$uic)
618            qualifier confirm
619            qualifier created
620            qualifier default
621            qualifier delete
622            qualifier edit,         syntax=acledit,nonnegatable
623            qualifier exclude,      value(required,list)
624            qualifier expired
625            qualifier like,         value(required,type=set_acl_like)
626            qualifier log
627            qualifier modified
628            qualifier new
629            qualifier object_type,  value(type=acl_objects)
630            qualifier replace,      value(required,list,type=$acl)
631            qualifier since,        value(default=today)
632
633    define type set_acl_like
634            keyword object_name,    value(required)
635            keyword object_type,    value(required,type=acl_objects)
636
637    define type dial_keywords
638            keyword number,         value(required)
639            keyword modem_type,     value(default=DF03),default
640
641    define syntax set_audit
642            parameter p1,label=option,value(required)
643            disallow not alarm
644            disallow not enable and not disable
645            qualifier alarm,        nonnegatable
646            qualifier disable,      nonnegatable,value(required,list,type=audit_types)
647            qualifier enable,       nonnegatable,value(required,list,type=audit_types)
648            qualifier log           nonnegatable
649
650    define syntax set_broadcast
651            parameter p1,label=option,value(required,list,type=set_options)
652            noqualifiers
653
654    define syntax set_card_reader
655            parameter p1,label=option,value(required)
656            parameter p2,label=device,prompt="Device",value(required,type=$device)
657            qualifier 026
658            qualifier 029
659            qualifier log
660
661    define syntax set_cluster
662            qualifier quorum,       value,nonnegatable
663
664    define syntax set_control
665            parameter p1,label=option,value(required)
666            noqualifiers
667            cliroutine setctly
668
669    define syntax set_device
670            parameter p1,label=option,value(required)
671            parameter p2,label=file,prompt="Device",value(required,type=$device)
672            qualifier spooled,      value(list)
```

```
673            qualifier error_logging
674            qualifier available
675            qualifier dual_port
676            qualifier log
677            qualifier served
678     !      qualifier write
679     !      qualifier controller,    value(required)
680            qualifier diagnostic
681
682            qualifier acl,                  syntax=set_dev_acl,nonnegatable,
683                                            value(list,type=$acl)
684            qualifier after,                value(required,type=$acl)
685            qualifier default
686            qualifier delete
687            qualifier edit,                 syntax=acledit,nonnegatable
688            qualifier like,                 value(required,type=$device)
689            qualifier new
690            qualifier replace,              value(required,list,type=$acl)
691     !      disallow (write or controller or neg write) and not served
692
693     define syntax set_dev_acl
694            image setshoacl
695            parameter p1,label=option,value(required)
696            parameter p2,prompt="Device",value(list,required,type=$infile),label=input
697
698     define syntax set_default
699            cliroutine setdefalt
700            parameter p1,label=option,value(required)
701            parameter p2,prompt="Directory",value(required,type=$directory)
702            noqualifiers
703
704     define syntax set_directory
705            parameter p1,label=option,value(required)
706            parameter p2,label=directory,prompt="Directory",value(list,required,impcat,type=$directory)
707            qualifier confirm
708            qualifier log
709            qualifier owner_uic,            value(type=$uic)
710            qualifier version_limit,        value
711            qualifier exclude,              value(required,list)
712            qualifier before,               value(default=today)
713            qualifier since,                value(default=today)
714            qualifier backup
715            qualifier created
716            qualifier modified
717            qualifier expired
718            qualifier by_owner,             value(type=$uic)
719            qualifier acl,                  syntax=set_dir_acl,
720                                            value(list,type=$acl),nonnegatable
721            qualifier after,                value(required,type=$acl)
722            qualifier default
723            qualifier delete
724            qualifier edit,                 syntax=acledit,nonnegatable
725            qualifier like,                 value(required,type=$infile)
726            qualifier new
727            qualifier replace,              value(required,list,type=$acl)
728
```

```
729     define syntax set_dir_acl
730             image setshoacl
731             parameter p1,label=option,value(required)
732             parameter p2,prompt="Directory",value(list,required,type=$infile),label=input
733
734     define syntax set_file
735             parameter p1,label=option,value(required)
736             parameter p2,label=file,prompt="File",value(list,impcat,required,type=$infile)
737             qualifier backup
738             qualifier confirm
739             qualifier data_check,              value(list)
740             qualifier end_of_file,
741             qualifier enter                    value(required,type=$infile)
742             qualifier erase_on_delete
743             qualifier expiration_date,         value(required,type=$datetime)
744             qualifier extension,               value
745             qualifier global_buffers,          value(required)
746  !**JNL**      qualifier journal,                   value(required,list,
747  !**JNL**                                          type=journal_keywords),nonnegatable
748             qualifier log
749             qualifier nodirectory
750             qualifier owner_uic,               value(type=$infile)
751             qualifier record_protection,       value
752             qualifier truncate
753             qualifier remove
754             qualifier version_limit,           value
755             qualifier exclude,                 value(required,list)
756             qualifier before,                  value(default=today)
757             qualifier since,                   value(default=today)
758             qualifier created
759             qualifier modified
760             qualifier by_owner,                value(type=$uic)
761             qualifier acl,                     syntax=set_file_acl,
762                                                value(list,type=$acl),nonnegatable
763             qualifier after,                   value(required,type=$acl)
764             qualifier default
765             qualifier delete
766             qualifier edit,                    syntax=acledit,nonnegatable
767             qualifier like,                    value(required,type=$infile)
768             qualifier new
769             qualifier replace,                 value(required,list,type=$acl)
770             qualifier unlock,
771             qualifier protection,              value(list,type=protection)
772
773     define syntax set_file_acl
774             image setshoacl
775             parameter p1,label=option,value(required)
776             parameter p2,prompt="File",value(list,required,type=$infile),label=input
777
778     define syntax set_output_rate
779             cliroutine setflush
780             parameter p1,label=option,value(required,type=set_options)
781
782     define syntax set_host_bts
783             image btslnk
784             qualifier exit_key,        label=exitkey,nonnegatable,value(required)
```

```
785
786    define syntax set_host_hsc
787        image hscpad
788        noqualifiers
789
790    define syntax set_host_sna
791        image   snaterm
792        qualifier access_name,    label=snaterm_access_name,
793                                  value(required),nonnegatable,placement=global
794        qualifier session_address, label=snaterm_session_addr,
795                                  value(required),nonnegatable,placement=global
796        qualifier circuit,        label=snaterm_circuit,
797                                  value(required),nonnegatable,placement=global
798        qualifier application_name, label=snaterm_appl_name,
799                                  value(required),nonnegatable,placement=global
800        qualifier logon_mode,     label=snaterm_logon_mode,
801                                  value(required),nonnegatable,placement=global
802        qualifier user_name,      label=snaterm_user_name,
803                                  value(required),nonnegatable,placement=global
804        qualifier data,           label=snaterm_data,
805                                  value(required),nonnegatable,placement=global
806        qualifier password,       label=snaterm_password,
807                                  value(required),nonnegatable,placement=global
808        qualifier printer,        label=snaterm_printer,
809                                  value(required,type=$outfile),
810                                  nonnegatable,placement=global
811        qualifier wait,           label=snaterm_wait,placement=global
812        qualifier character_set,label=snaterm_character_set,
813                                  value(required,type=$infile),nonnegatable
814
815    define       syntax set_host_x29
816        image psipad
817        parameter p1,             label=option,value(required)
818        parameter p2,             label=psipad_dte,prompt="Node",value(required)
819        qualifier ccitt,          label=psipad_ccitt,syntax=set_host_x29_ccitt,
820                                  nonnegatable
821        qualifier closed_user_group, label=psipad_cug,nonnegatable,value
822        qualifier default_escape_character, label=psipad_dle,default,
823                                  value(default=P)
824        qualifier facilities,     label=psipad_facilities,
825                                  value(required,list,type=$number)
826        qualifier fast_select,    label=psipad_fast_select
827        qualifier local_dte,      label=psipad_local_dte,value(required)
828        qualifier log,            label=psipad_log,
829                                  value(type=$outfile,default=PSIPAD.LOG)
830        qualifier packet_size,    label=psipad_packet_size,
831                                  value(type=$number,required)
832        qualifier parameters,     label=psipad_parameters,
833                                  value(type=x29_param_type,list,required)
834        qualifier profile,        label=psipad_profile,value(required,list)
835        qualifier protocol_identifier, label=psipad_protocol_id,nonnegatable,
836                                  value(required)
837        qualifier reverse_charging, label=psipad_reverse
838        qualifier statistics,     label=psipad_statistics,default
839        qualifier subaddress,     label=psipad_subaddress,value(required)
840        qualifier thruput_class,  label=psipad_thruput_class,
```

```
841                              value(required,type=$number)
842          qualifier user_data,    label=psipad_user_data,value(required)
843          qualifier vms_mode,     label=psipad_vms_mode
844          qualifier window_size,  label=psipad_window_size,
845                              value(required,type=$number)
846          disallow psipad_parameters.x29_speed
847          disallow psipad_parameters.x29_speed_n
848
849     define          syntax set_host_x29_ccitt
850          parameter p1,           label=option,value(required)
851          parameter p2,           label=psipad_dte,prompt="Node"
852          disallow <set_host_x29>psipad_parameters.x29_speed
853          disallow <set_host_x29>psipad_parameters.x29_speed_n
854          disallow not psipad_dte and (
855                         <set_host_x29>psipad_cug or
856                         <set_host_x29>psipad_facilities or
857                         <set_host_x29>psipad_fast_select or
858                         <set_host_x29>psipad_local_dte or
859                         <set_host_x29>psipad_packet_size or
860                         <set_host_x29>psipad_protocol_id or
861                         <set_host_x29>psipad_reverse or
862                         <set_host_x29>psipad_subaddress or
863                         <set_host_x29>psipad_thruput_class or
864                         <set_host_x29>psipad_user_data or
865                         <set_host_x29>psipad_window_size )
866
867     define syntax set_host
868          image rtpad
869          parameter p1,label=option,value(required)
870          parameter p2,prompt="Node",value(required,type=$node),
871                         label=node
872          qualifier sna,          nonnegatable,syntax=set_host_sna
873          qualifier bts,          nonnegatable,syntax=set_host_bts
874          qualifier old,          label=old
875          qualifier log,          label=log,
876                              value(default=SETHOST.LOG,type=$outfile)
877          qualifier dte,          label=dte
878          qualifier dial,         value(list,type=dial_keywords)
879          qualifier hsc,          nonnegatable,syntax=set_host_hsc
880          qualifier x29,          nonnegatable,syntax=set_host_x29
881
882     define syntax set_key
883          prefix cli$k_stky_
884          cliroutine setkey
885          qualifier state,value(required)
886          qualifier log
887
888     define syntax set_logins
889          parameter p1,label=option,value(required)
890          qualifier interactive,  value
891
892     define syntax set_magtape
893          parameter p1,label=option,value(required)
894          parameter p2,label=device,prompt="Device",value(required,type=$device)
895          qualifier density,      value(required)
896          qualifier rewind
```

```
897          qualifier unload
898          qualifier logsoft
899          qualifier log
900          qualifier end_of_file,
901          qualifier skip,              value(required,type=skiptypes)
902
903     define syntax set_message
904          image setp0
905          parameter p1,label=option,value(required)
906          parameter p2,label=file,prompt="File",value(type=$infile)
907          qualifier delete,
908          qualifier facility
909          qualifier ident
910          qualifier severity
911          qualifier text
912          qualifier language,          value(required)
913
914     define syntax set_on
915          cliroutine seton
916          parameter p1,label=option,value(required)
917          noqualifiers
918
919     define syntax set_password
920          image setp0
921          parameter p1,label=option,value(required)
922          qualifier generate           value(type=$number)
923          qualifier secondary
924          qualifier system
925
926          disallow  secondary and system
927
928     define syntax set_printer
929          parameter p1,label=option,value(required)
930          parameter p2,label=device,prompt="Device",value(required,type=$device)
931          qualifier cr
932          qualifier ff
933          qualifier uppercase
934          qualifier lowercase
935          qualifier la11              nonnegatable
936          qualifier la180             nonnegatable
937          qualifier lp11              nonnegatable
938          qualifier page,             default,value,nonnegatable
939          qualifier unknown           nonnegatable
940          qualifier width,            default,value,nonnegatable
941          qualifier passall
942          qualifier fallback
943          qualifier davfu
944          qualifier form_unit
945          qualifier wrap
946          qualifier printall
947          qualifier log
948          qualifier truncate
949          qualifier tab
950          qualifier sixels
951          qualifier bitmapped
952
```

```
 953    define syntax set_process
 954            parameter p1,label=option,value(required)
 955            parameter p2,label=process,prompt="Process",value(type=$process)
 956            qualifier identification,value(required)
 957            qualifier priority,     value(required)
 958            qualifier resource_wait
 959            qualifier swapping
 960            qualifier privileges,    value(list,required,type=privileges)
 961            qualifier suspend
 962            qualifier resume,
 963            qualifier name,          value(required)
 964            qualifier log
 965            qualifier dump
 966
 967    define syntax set_prompt
 968            cliroutine setprompt
 969            parameter p1,label=option,value
 970            qualifier carriage_control
 971
 972    define syntax set_def_prot
 973            cliroutine setprot
 974            prefix cli$k_stpr
 975            parameter p1,label=option,value(required)
 976            qualifier default
 977
 978    define syntax set_protection
 979            parameter p1,label=option,value(required,type=set_options)
 980            parameter p2,label=file,prompt="File",value(list,required,impcat,type=$infile)
 981            qualifier default,       syntax=set_def_prot,nonnegatable
 982            qualifier protection,    placement=local,
 983                                     value(list,type=protection,required)
 984            qualifier device
 985            qualifier owner_uic,     value(type=$uic)
 986            qualifier confirm
 987            qualifier log
 988
 989    define syntax set_queue
 990            image queman
 991            parameter p1,label=option,value(required,type=set_options)
 992            parameter p2,prompt="Queue",value(required)
 993            qualifier after,         value(required,type=$datetime)
 994            qualifier base_priority,value(required)
 995            qualifier block_limit,   value(list)
 996            qualifier burst
 997            qualifier characteristics,value(required,list)
 998            qualifier checkpoint,    default
 999            qualifier cli,           value(required)
1000            qualifier copies,        value(required)
1001            qualifier cpudefault,    value(required)
1002            qualifier cpumaximum,    value(required)
1003            qualifier cputime,       value(required)
1004            qualifier default,       value(required,list,type=defaults)
1005            qualifier delete
1006            qualifier disable_swapping
1007            qualifier enable_generic
1008            qualifier entry,         value(required)
```

```
1009          qualifier feed
1010          qualifier flag
1011          qualifier form,          value(required)
1012          qualifier header
1013          qualifier hold
1014          qualifier job_,          value(required) ! collision: job_count, job_limit
1015          qualifier keep
1016          qualifier log_file,       value(required)
1017          qualifier lowercase
1018          qualifier name,          value(required)
1019          qualifier note,          value(required)
1020          qualifier notify
1021          qualifier operator,       value(required)
1022          qualifier owner_uic,      value(required,type=$uic)
1023          qualifier pages,         value(list)
1024          qualifier parameters,     value(required,list)
1025          qualifier passall
1026          qualifier printer,        value(required)
1027          qualifier priority,       value(required)
1028          qualifier protection,     value(required,list,type=protection)
1029          qualifier release
1030          qualifier requeue,        value(required)
1031          qualifier restart
1032          qualifier retain,         value(type=retain)
1033          qualifier schedule,       value(required,list,type=schedule)
1034          qualifier separate,       value(required,list,type=separate)
1035          qualifier setup,         value(required,list)
1036          qualifier space
1037          qualifier trailer
1038          qualifier wsdefault,      value(required)
1039          qualifier wsextent,       value(required)
1040          qualifier wsquota,        value(required)
1041
1042     define syntax set_restart_value
1043          image queman
1044          parameter p1,label=option,value(required,type=set_options)
1045
1046     define syntax set_rms_default
1047          parameter p1,label=option,value(required)
1048          qualifier block_count,   value(required)
1049          qualifier buffer_count,  value(required)
1050          qualifier disk
1051          qualifier magtape
1052          qualifier unit_record
1053          qualifier hash
1054          qualifier indexed
1055          qualifier relative
1056          qualifier sequential
1057          qualifier system
1058          qualifier space_holder
1059          qualifier prologue,       value(required)
1060          qualifier extend_quantity,value(required)
1061          qualifier network_block_count,value(required)
1062
1063     define syntax set_terminal
1064          parameter p1,label=option,value(required)
```

```
1065            parameter p2,label=device,prompt="Device",value(type=$device)
1066            qualifier application_keypad
1067            qualifier broadcast
1068            qualifier crfill,        value
1069            qualifier dismiss_parity
1070            qualifier echo
1071            qualifier eight_bit
1072            qualifier escape
1073            qualifier hardcopy
1074            qualifier hold_screen
1075            qualifier hostsync
1076            qualifier interactive
1077            qualifier la36          nonnegatable
1078            qualifier lffill,        value
1079            qualifier form
1080            qualifier frame,         value,nonnegatable
1081            qualifier lowercase
1082            qualifier numeric_keypad
1083            qualifier page,          value
1084            qualifier passall
1085            qualifier la120          nonnegatable
1086            qualifier scope
1087            qualifier scribe
1088            qualifier speed,         value(required,list)
1089            qualifier tab
1090            qualifier ttsync
1091            qualifier typeahead
1092            qualifier unknown        nonnegatable
1093            qualifier uppercase
1094            qualifier vt05           nonnegatable
1095            qualifier vt52           nonnegatable
1096            qualifier vt55           nonnegatable
1097            qualifier width,         value
1098            qualifier wrap
1099            qualifier parity,        value
1100            qualifier readsync
1101            qualifier permanent      nonnegatable
1102            qualifier vt100          nonnegatable
1103            qualifier ft1            nonnegatable
1104            qualifier ft2            nonnegatable
1105            qualifier ft3            nonnegatable
1106            qualifier ft4            nonnegatable
1107            qualifier ft5            nonnegatable
1108            qualifier ft6            nonnegatable
1109            qualifier ft7            nonnegatable
1110            qualifier ft8            nonnegatable
1111            qualifier fulldup
1112            qualifier halfdup
1113            qualifier local_echo
1114            qualifier autobaud
1115            qualifier hangup
1116            qualifier brdcstmbx
1117            qualifier dma
1118            qualifier altypeahd
1119            qualifier ansi_crt
1120            qualifier regis
```

```
1121          qualifier block_mode
1122          qualifier advanced_video
1123          qualifier xon              nonnegatable
1124          qualifier device_type    value(required),nonnegatable
1125          qualifier modem
1126          qualifier inquire          nonnegatable
1127          qualifier dec_crt.        value(list)
1128          qualifier edit
1129          qualifier set_speed
1130          qualifier line_edit
1131          qualifier disconnect
1132          qualifier fallback
1133          qualifier dialup
1134          qualifier insert_editing
1135          qualifier printer_port
1136          qualifier secure_server
1137          qualifier sixel
1138          qualifier soft_characters
1139          qualifier overstrike
1140          qualifier log
1141          qualifier pasthru
1142          qualifier syspassword
1143          qualifier protocol        value(required,type=protocol_types),nonnegatable
1144          qualifier x29.            nonnegatable,syntax=set_term_x29
1145
1146  define        syntax  set_term_x29
1147          image   psisetx29
1148          parameter        p1,      label=option,value(required)
1149          parameter        p2,      label=device,prompt="Device",value(type=$device)
1150          qualifier        hold_timer,    value(type=$number,required)
1151                                        label=psisetx29_hold_timer
1152          qualifier        interrupt,    value(type=psisetx29_int_brk,list,
1153                                               required),
1154                                               label=psisetx29_interrupt
1155          qualifier        break,        value(type=psisetx29_int_brk,list,
1156                                               required),
1157                                               label=psisetx29_break
1158          qualifier        parameters,   label=psisetx29_parameters
1159                                   value(type=x29_param_type,list,required)
1160          qualifier        network_specific label=psisetx29_network_specific
1161                                   value(list,required)
1162          qualifier        permanent,    label=psisetx29_permanent,nonnegatable
1163          qualifier        log.          label=psisetx29_log
1164
1165  define syntax set_uic
1166          cliroutine setuic
1167          parameter p1,label=option,value(required)
1168          parameter p2,prompt="UIC",value(required,type=$uic)
1169          noqualifiers
1170
1171  define syntax set_verify
1172          cliroutine setverify
1173          parameter p1,label=option,value(required,type=set_options)
1174          disallow (not verify and (verify.procedure or verify.image))
1175
1176  define syntax set_volume
```

```
1177          parameter p1,label=option,value(required)
1178          parameter p2,label=volume,prompt="Volume",value(required,type=$infile)
1179          qualifier accessed,            value
1180          qualifier data_check,          value(list)
1181          qualifier erase_on_delete
1182          qualifier extension,           value
1183          qualifier file_protection,     value(type=protection,list,required)
1184          qualifier highwater_marking
1185          qualifier label,               value(required)
1186          qualifier log
1187          qualifier mount_verification
1188          qualifier owner_uic,           value(type=$uic)
1189          qualifier protection,          value(type=protection,list,required)
1190          qualifier rebuild
1191          qualifier retention,           value(list,required)
1192          qualifier unload
1193          qualifier user_name,           value
1194          qualifier windows,             value
1195
1196   define syntax set_working_set
1197          parameter p1,label=option,value(required)
1198          qualifier limit,       value(required)
1199          qualifier quota,       value(required)
1200          qualifier extent,      value(required)
1201          qualifier adjust
1202          qualifier log
1203
1204   define syntax set_day
1205          parameter p1,label=option,value(required)
1206          qualifier primary
1207          qualifier secondary
1208          qualifier default
1209
1210   ! The following definitions comprise the SET COMMAND command, which is used
1211   ! to compile and manipulate command definition (CLD) files and their
1212   ! associated CLI tables.
1213
1214   define type cli_names
1215          keyword dcl,label=cli_dcl,default
1216          keyword mcr,label=cli_mcr
1217
1218   define syntax set_command
1219          image cdu
1220          parameter p1,label=option,value(required)
1221          parameter p2,label=cld_spec,prompt="CLD File(s)",value(list,type=$infile)
1222          qualifier delete,value(required,list)
1223          qualifier object,value(type=$outfile)
1224          qualifier replace,default
1225          qualifier symbols,value(required,type=$outfile)
1226          qualifier cli,default,nonnegatable,value(required,type=cli_names)
1227          qualifier listing,value(type=$outfile)
1228          qualifier log
1229          qualifier output,default,value(type=$outfile)
1230          qualifier tables,default,value(type=$infile)
1231          disallow (any2(delete,object,replace,symbols))
1232          disallow (listing and (delete or symbols))
```

```
1233
1234      define syntax no_parameter
1235          parameter p1,label=option,value(required,type=set_options)
1236          noqualifiers
1237
1238      define type set_options
1239          keyword accounting,        syntax=set_accounting
1240          keyword acl,               syntax=set_acl
1241          keyword audit,             syntax=set_audit
1242          keyword broadcast,         syntax=set_broadcast,
1243                                     value(list,required,type=brdcst_types)
1244          keyword card_reader,       syntax=set_card_reader
1245          keyword cluster,           syntax=set_cluster
1246          keyword device,            syntax=set_device
1247          keyword default,           syntax=set_default
1248          keyword directory,         syntax=set_directory
1249          keyword file,              syntax=set_file
1250          keyword logins,            syntax=set_logins
1251          keyword magtape,           syntax=set_magtape
1252          keyword on,                syntax=set_on,negatable
1253          keyword password,          syntax=set_password
1254          keyword printer,           syntax=set_printer
1255          keyword process,           syntax=set_process
1256          keyword protection,        syntax=set_protection,
1257                                     value(list,type=protection)
1258          keyword queue,             syntax=set_queue
1259          keyword terminal,          syntax=set_terminal
1260          keyword uic,               syntax=set_uic
1261          keyword verify,            syntax=set_verify,negatable,
1262                                     value(list,type=verify_keys)
1263          keyword volume,            syntax=set_volume
1264          keyword working_set,       syntax=set_working_set
1265          keyword rms_default,       syntax=set_rms_default
1266          keyword control_y,         syntax=set_control,negatable,
1267                                     value(list,type=control_keys)
1268          keyword time,              syntax=no_parameter,value
1269          keyword host,              syntax=set_host
1270          keyword message,           syntax=set_message
1271          keyword command,           syntax=set_command
1272          keyword day,               syntax=set_day
1273          keyword prompt,            syntax=set_prompt,value
1274          keyword key,               syntax=set_key
1275          keyword restart_value,     syntax=set_restart_value,value
1276          keyword output_rate,       syntax=set_output_rate,value(type=$deltatime)
1277
1278      define verb set
1279          parameter p1,label=option,prompt='What",
1280                          value(required,type=set_options)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1   Version:    'V04-000'
 2
 3       V03-034 AEW0003          Anne E. Warner          20-Jul-1984
 4       Change SHOW MSCP to be SHOW DEVICE/SERVED.  Add syntax
 5       show_served pointed to by qualifier 'served' in
 6       show_device.  Show_served has the following qualifiers:
 7           1.  ALL
 8           2.  COUNT
 9           3.  HOST
10           4.  RESOURCE
11           5.  OUTPUT
12
13
14       V03-034 MCN0173          Maria del C. Nasr       25-Jun-1984
15       Make the /OUTPUT qualifier default to SYS$OUTPUT.
16
17       V03-033 AEW0002          Anne E. Warner          27-Apr-1984
18       Add keyword MSCP to show Mass Storage devices.  This
19       keyword has the qualifiers:
20           1.  COUNT
21           2.  HOST
22           3.  RESOURCE
23           4.  UNITS
24           5.  OUTPUT
25
26       V03-032 HWS0020          Harold Schultz          10-Apr-1984
27       Add qualifier /LOG to SHOW KEY.
28
29       V03-031 LMP0217          L. Mark Pilant,         24-Mar-1984  22:21
30       Change all references to SHOWACL to SETSHOACL.
31
32         V03-030    PCG0010      Peter George            14-Mar-1984
33         Change default value of SHOW QUEUE/OUTPUT.
34         Make SHOW KEY/DIR and /FULL mutually exclusive.
35         Add SHOW SYMBOL/LOG.
36         Update SHOW LOGICAL command.
37
38       V03-029 HWS0019          Harold Schultz          06-Mar-1984
39       Integrate in SHOW TERM/X29
40
41         V03-028 PCG0009          Peter George            29-Feb-1984
42         Add /OUTPUT qualifier to SHOW QUEUE.
43
44       V03-025 PRD0068          Paul R. DeStefano       28-Feb-1984
45       Change SHOW CLUSTER/INTERVAL=deltatime to
46       /INTERVAL=seconds.  Limit values on /REPORT=
47       to CLUSTER, LOCAL_PORTS, and CYCLE.
48
49         V03-026 PCG0008          Peter George            27-Feb-1984
50         Add /FULL qualifier to SHOW KEY.
51
52       V03-025 MCN0152          Maria del C. Nasr       23-Feb-1984
53       Disallow /CONTINUOUS and /OUTPUT qualifiers for
54       SHOW PROCESS.
55
56         V03-024 AEW0001          Anne E. Warner  02-Feb-1984
```

```
 57 |         Add qualifier /FULL  to SHOW SYSTEM.
 58 |
 59 |   V03-023 LMP0185         L. Mark Pilant,         1-Feb-1984  13:53
 60 |         Add support for device ACLs.
 61 |
 62 |   V03-022 TMK0001         Todd M. Katz   18-Oct-1983
 63 |         Change which SHOW LOGICAL qualifiers are mutually
 64 |         exclusive. Also, change the spelling of the qualifier
 65 |         descendents to descendants.
 66 |
 67 |   V03-021 KFH0003         Ken Henderson  22 Sep 1983
 68 |         Mods to support generized table handling in
 69 |         SHOW LOGICAL.
 70 |
 71 |   V03-020 GAS0175         Gerry Smith    30-Aug-1983
 72 |         Add SHOW BROADCAST, as well as /OUTPUT where
 73 |         possible.
 74 |
 75 |   V03-019 PCG0007         Peter George   17-Aug-1983
 76 |         Remove SHOW XTRANSLATION.
 77 |
 78 |   V03-018 GAS0154         Gerry Smith    25-Jul-1983
 79 |         Add SHOW AUDIT.
 80 |
 81 |   V03-017 KFH0002         Ken Henderson  21 Jul 1983
 82 |         Modify SHOW LOGICAL.
 83 |
 84 |   V03-016 MAJ0001         Melanie Johnson 23-Jun-1983
 85 |         Remove mcrignore flag from SHOW XTRAN.
 86 |
 87 |   V03-015 MLJ0115         Martin L. Jack 23-Jun-1983
 88 |         Update SHOW QUEUE.
 89 |
 90 |   V03-014 KFH0001         Ken Henderson  16 Jun 1983
 91 |         Modify SHOW LOGICAL.
 92 |
 93 |   V03-013 PCG0006         Peter George   27-May-1983
 94 |         Add SHOW XTRAN.
 95 |
 96 |   V03-012 MLJ0012         Martin L. Jack 27-May-1983
 97 |         Changes for new QUEMAN image.
 98 |
 99 |   V03-011 PCG0005         Peter George   13-Apr-1983
100 |         Add SHOW KEY/BRIEF/DIRECTORY.
101 |
102 |   V03-010 PRD0010         Paul DeStefano 28-Mar-1983
103 |         Added qualifiers to SHOW CLUSTER command.
104 |
105 |   V03-009 PCG0004         Peter George   28-Mar-1983
106 |         Add SHOW KEY.
107 |         Uncomment NOSTATs.
108 |
109 |   V03-008 PCA1008         Paul C. Anagnostopoulos 25-Mar-1983
110 |         Make all necessary changes for new CDU.
111 |
112 |   V03-007 PCG0003         Peter George   02-Mar-1983
```

```
113 |            Comment out NOSTATs for now.
114 |
115 |    V03-006 PCG0002          Peter George   24-Feb-1983
116 |            Set NOSTAT bit in SHOW STATUS and SHOW SYMBOL.
117 |
118 |    V03-005 PRD0007          Paul DeStefano  2-Feb-1983
119 |            Added SHOW CLUSTER command.
120 |            Removed all PREFIX statements.
121 |
122 |    V03-004 GAS0101          Gerry Smith    13-Jan-1983
123 |            Complete GAS0099.
124 |
125 |    V03-003 GAS0099          Gerry Smith     7-Jan-1983
126 |            Changes for the new SHOW image.
127 |
128 |    V03-002 MLJ0002          Martin L. Jack  01-Jan-1983
129 |            Changes for new QUEMAN image.
130 |
131 |    V03-001 PCG0001          Peter George   19-Oct-1982
132 |            Copy previous parameter definitions into each
133 |            DEFINE SYNTAX statement.  Change SHOW DEVICE to
134 |            SHOW DEVICES.
135 |
136
137 define type acl_objects
138        keyword file
139        keyword device
140        keyword queue
141        keyword event_cluster
142        keyword logical_name_table
143        keyword process
144        keyword global_section
145
146
147 define type acmode
148        keyword user_mode
149        keyword supervisor_mode
150        keyword executive_mode
151        keyword kernel_mode
152
153 define syntax show_acl
154        image setshoacl
155        parameter p1,label=option,value(required)
156        parameter p2,label=input,prompt="Object name",value(required)
157        qualifier object_type,  value(required,type=acl_objects)
158
159 define syntax show_broad
160        parameter p1,label=option,value(required)
161        qualifier output,        default,value(type=$file,default="SYS$OUTPUT")
162
163 define syntax show_cpu
164        image mp
165        parameter p1,label=option,value(required)
166        noqualifiers
167
168 define syntax show_daytime
```

```
169          cliroutine showtime
170          parameter p1,label=option,value(required)
171          noqualifiers
172
173  define syntax show_default
174          cliroutine showdef
175          parameter p1,label=option,value(required)
176          noqualifiers
177
178  define syntax show_all_keys
179          parameter p1,label=option,value(required)
180
181  define syntax show_all_states
182          parameter p1,label=option,value(required)
183
184  define syntax show_key
185          prefix cli$k_shky_
186          cliroutine showkey
187          parameter p1,label=option,value(required)
188          parameter p2,prompt="Key name",value(required)
189          qualifier all,syntax=show_all_keys
190          qualifier state,value(required,list)
191          qualifier brief
192          qualifier directory,syntax=show_all_states
193          qualifier full
194          qualifier log
195          disallow directory and (brief or state or all or full)
196
197  define syntax show_logical
198          parameter p1,label=option,value(required)
199          parameter p2,label=logname,prompt="Logical name",value(list,type=$inlog)
200          qualifier output,         default,value(type=$file,default="SYS$OUTPUT")
201          qualifier system
202          qualifier group
203          qualifier process
204          qualifier job
205          qualifier all
206          qualifier table,value(list,required)
207          qualifier descendants
208          qualifier structure
209          qualifier access_mode,value(required,type=acmode)
210          qualifier full
211          disallow structure and
212                  (system or group or job or process or table or descendants)
213
214  define syntax show_protection
215          cliroutine showprot
216          parameter p1,label=option,value(required)
217          noqualifiers
218
219  define syntax show_queue
220          image queman
221          parameter p1,label=option,value(required)
222          parameter p2,prompt="Queue",value(default="*")
223          qualifier all
224          qualifier batch
```

```
225          qualifier brief
226          qualifier characteristics
227          qualifier device
228          qualifier files
229          qualifier forms
230          qualifier full
231          qualifier output,        default,value(default="SYS$OUTPUT",type=$file)
232
233     define syntax show_all_symbols
234          parameter p1,label=option,value(required)
235
236     define syntax show_symbol
237          cliroutine showsymbl
238          prefix cli$k_shsy
239          cliflags(nostatus)
240          parameter p1,label=option,value(required)
241          parameter p2,prompt="Symbol",value(required,type=$insym)
242          qualifier global,        placement=positional
243          qualifier local,         placement=positional
244          qualifier all,           placement=positional,syntax=show_all_symbols
245          qualifier log
246
247     define syntax show_translation
248          cliroutine showtran
249          parameter p1,label=option,value(required)
250          parameter p2,prompt="Log_name",value(required,type=$inlog)
251          qualifier table,value(required)
252
253     define syntax show_served
254          parameter p1,label=option,value(required)
255          qualifier output,        default,value(type=$file,default="SYS$OUTPUT")
256          qualifier all,
257          qualifier count,
258          qualifier host,
259          qualifier resource,
260          qualifier served,             default,nonnegatable    ! 'served' is here
261                                        !because the code for show_device and show_served
262                                        !is different.  When the show_device code is
263                                        !entered the syntax being used is the show_served
264                                        !syntax but all of the qualifiers are different
265                                        !so it won't work.  The solution is to add the
266                                        !qualifier 'served' and have the show-device
267                                        !check for it first and to branch to the
268                                        !show_syntax code where this syntax will work.
269                                        !At this point 'served'is always present so it
270                                        !is 'default' and it is 'nonnegatable' to someone
271                                        !can't mess everything up by saying 'noserved'.
272
273     define syntax show_device
274          parameter p1,label=option,value(required)
275          parameter p2,label=device,prompt="Device",value(type=$device)
276          qualifier output,        default,value(type=$file,default="SYS$OUTPUT")
277          qualifier allocated,
278          qualifier brief
279          qualifier full
280          qualifier mounted
```

```
281         qualifier files
282         qualifier system
283         qualifier windows
284         qualifier served,              nonnegatable,syntax=show_served
285         disallow served and (allocated or brief or full or mounted or files or
286              system or windows)
287
288  define syntax show_status
289         cliroutine showstat
290         cliflags(nostatus)
291         parameter p1,label=option,value(required)
292         noqualifiers
293
294  define syntax show_process
295         parameter p1,label=option,value(required)
296         parameter p2,label=process,prompt="Process",value(type=$process)
297         qualifier output,              default,value(type=$file,default="SYS$OUTPUT")
298         qualifier quotas               nonnegatable
299         qualifier accounting           nonnegatable
300         qualifier privileges           nonnegatable
301         qualifier memory               nonnegatable
302         qualifier subprocesses         nonnegatable
303         qualifier identification       value(required),nonnegatable
304         qualifier continuous           nonnegatable
305         qualifier all                  nonnegatable
306         disallow continuous and output
307
308  define syntax show_system
309         parameter p1,label=option,value(required)
310         qualifier output,         default,value(type=$file,default="SYS$OUTPUT")
311         qualifier process,        default,nonnegatable
312         qualifier batch           nonnegatable
313         qualifier subprocess      nonnegatable
314         qualifier network         nonnegatable
315           qualifier full          nonnegatable
316
317  define syntax show_terminal
318         parameter p1,label=option,value(required)
319         parameter p2,label=device,prompt="Device",value(type=$device)
320         qualifier output,         default,value(type=$file,default="SYS$OUTPUT")
321         qualifier permanent       nonnegatable
322         qualifier x29,            syntax=show_term_x29
323
324  define        syntax   show_term_x29
325         image    psishowx29
326
327  define syntax show_printer
328         parameter p1,label=option,value(required)
329         parameter p2,label=device,prompt="Device",value(required,type=$device)
330         qualifier output,         default,value(type=$file,default="SYS$OUTPUT")
331
332  define syntax show_magtape
333         parameter p1,label=option,value(required)
334         parameter p2,label=device,prompt="Device",value(required,type=$device)
335         qualifier output,         default,value(type=$file,default="SYS$OUTPUT")
336
```

```
337  define syntax show_quota
338        cliroutine showquota
339        prefix cli$k_shqo
340        parameter p1,label=option,value(required)
341        qualifier disk,          default,value(type=$device)
342        qualifier user,          value(required,type=$uic)
343
344  define syntax show_memory
345        parameter p1,label=option,value(required)
346        qualifier output,                default,value(type=$file,default="SYS$OUTPUT")
347        qualifier physical_memory        nonnegatable
348        qualifier slots                  nonnegatable
349        qualifier pool                   nonnegatable
350        qualifier files                  nonnegatable
351        qualifier full                   nonnegatable
352        qualifier all                    nonnegatable
353
354  define syntax show_error
355        parameter p1,label=option,value(required)
356        qualifier output,        default,value(type=$file,default="SYS$OUTPUT")
357        qualifier brief          nonnegatable
358        qualifier full           nonnegatable
359
360  define syntax show_user
361        parameter p1,label=option,value(required)
362        parameter p2,label=username,prompt="Username",value
363        qualifier output,        default,value(type=$file,default="SYS$OUTPUT")
364
365  define syntax no_parameter
366        parameter p1,label=option,value(required)
367        noqualifiers
368
369  define type cluster_reports
370        keyword cluster
371        keyword local_ports
372        keyword cycle
373
374  define syntax show_cluster
375        image shwclstr
376        parameter p1,label=option,value(required)
377        qualifier beginning      value(required,type=$datetime),nonnegatable
378        qualifier continuous     nonnegatable
379        qualifier ending         value(required,type=$datetime),nonnegatable
380        qualifier interval       value(required,type=$number),nonnegatable
381        qualifier output         default,value(type=$file,default="SYS$OUTPUT")
382        qualifier report         value(required,type=cluster_reports),
383                                 nonnegatable
384
385  define type show_options
386        keyword acl,             syntax=show_acl
387        keyword broadcast,       syntax=show_broad
388        keyword cpu,             syntax=show_cpu
389        keyword daytime,         syntax=show_daytime
390        keyword time,            syntax=show_daytime
391        keyword default,         syntax=show_default
392        keyword logical,         syntax=show_logical
```

```
393            keyword protection,        syntax=show_protection
394            keyword queue,             syntax=show_queue
395            keyword symbol,            syntax=show_symbol
396            keyword translation,       syntax=show_translation
397            keyword working_set,       syntax=show_broad
398            keyword devices,           syntax=show_device
399            keyword status,            syntax=show_status
400            keyword process,           syntax=show_process
401            keyword system,            syntax=show_system
402            keyword terminal,          syntax=show_terminal
403            keyword printer,           syntax=show_printer
404            keyword network,           syntax=show_broad
405            keyword rms_default,       syntax=show_broad
406            keyword magtape,           syntax=show_magtape
407            keyword quota,             syntax=show_quota
408            keyword memory,            syntax=show_memory
409            keyword users,             syntax=show_user
410            keyword error,             syntax=show_error
411            keyword accounting,        syntax=show_broad
412            keyword cluster,           syntax=show_cluster
413            keyword key,               syntax=show_key,cliflags(mcrignore)
414            keyword audit,             syntax=show_broad
415
416    define verb show
417            parameter p1,label=option,prompt="What",
418                        value(required,type=show_options)
419
420
421
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1      !
 2      ! Version:    'V04-000'
 3      !
 4
 5      module sortmerge
 6      define type sort_key
 7              keyword position,value(required,type=$number)
 8              keyword size,value(required,type=$number)
 9              keyword number,value(required,type=$number)
10              keyword binary
11              keyword character
12              keyword decimal
13              keyword d_floating
14              keyword f_floating
15              keyword g_floating
16              keyword h_floating
17              keyword packed_decimal
18              keyword zoned
19              keyword signed
20              keyword unsigned
21              keyword leading_sign
22              keyword trailing_sign
23              keyword overpunched_sign
24              keyword separate_sign
25              keyword ascending
26              keyword descending
27 !!         keyword dtype,value(required)
28
29      define type sort_type
30              keyword address
31              keyword index
32              keyword record
33              keyword tag
34
35      define type record_format
36              keyword fixed,          value(type=$number)
37              keyword variable,       value(type=$number)
38              keyword controlled,     value(type=$number)
39              keyword size,           value(required,type=$number)
40              keyword block_size,     value(required,type=$number)
41              keyword record_size,    value(type=$number)
42              keyword file_size,      value(type=$number)
43
44      define type collating_type
45              keyword ascii
46              keyword ebcdic
47              keyword multinational
48
49      define syntax sort_using_srt
50              image backtrans
51
52      define verb sort
53              image sortmerge
54              prefix cli$_sort_
55              parameter p1,prompt="Input",value(required,list,type=$infile)
56              parameter p2,prompt="Output",value(required,type=$outfile)
```

```
 57         qualifier process,      value(required,type=sort_type)
 58         qualifier key,          value(required,list,type=sort_key)
 59         qualifier zzzz,
 60         qualifier work_files,   value(type=$number), default
 61         qualifier specification,value(type=$infile)
 62         qualifier rsx11,        syntax=sort_using_srt
 63         qualifier format,       value(required,list,type=record_format),
 64                                 placement=local
 65         qualifier bucket_size,  value(required,type=$number),
 66                                 placement=positional
 67         qualifier allocation,   value(required,type=$number),
 68                                 placement=positional
 69         qualifier block_size,   value(required,type=$number),placement=local,
 70                                 syntax=sort_using_srt
 71         qualifier contiguous,   placement=positional
 72         qualifier device,       value(required,type=$device),
 73                                 syntax=sort_using_srt
 74         qualifier indexed_sequential,value(type=$number),placement=positional
 75         qualifier relative,     placement=positional
 76         qualifier sequential,   placement=positional
 77         qualifier overlay,      placement=local
 78         qualifier stable,
 79         qualifier statistics,
 80         qualifier load_fill,    placement=local
 81         qualifier collating_sequence value(required,type=collating_type)
 82         qualifier duplicates,   default !!,value
 83         qualifier check_sequence
 84
 85 define verb merge
 86         image sortmerge
 87         prefix cli$k_merg_
 88         parameter p1,prompt="Input",value(required,list,type=$infile)
 89         parameter p2,prompt="Output",value(required,type=$outfile)
 90         qualifier process,      value(required,type=sort_type)
 91         qualifier key,          value(required,list,type=sort_key)
 92         qualifier zzzz,
 93         qualifier work_files,   value(type=$number)
 94         qualifier specification,value(type=$infile)
 95         qualifier zzzy,
 96         qualifier format,       value(required,list,type=record_format),
 97                                 placement=local
 98         qualifier bucket_size,  value(required,type=$number),
 99                                 placement=positional
100         qualifier allocation,   value(required,type=$number),
101                                 placement=positional
102         qualifier block_size,   value(required,type=$number),placement=local
103                                 syntax=sort_using_srt
104         qualifier contiguous,   placement=positional
105         qualifier zzzx,
106         qualifier indexed_sequential,value(type=$number),placement=positional
107         qualifier relative,     placement=positional
108         qualifier sequential,   placement=positional
109         qualifier overlay,      placement=local
110         qualifier stable
111         qualifier statistics
112         qualifier load_fill,    placement=local
```

```
   113        qualifier collating_sequence.value(required,type=collating_type)
   114        qualifier duplicates,   default !!,value
   115        qualifier check_sequence,        default

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT
```

```
     1          Version:    'V04-000'
     2
     3
     4              V03-007 HWS042              Harold Schultz   29-Mar-1984
     5                  Add SPAWN/TABLE
     6
     7              V03-006 MAJ0001             Melanie Johnson 04-Jan-1984
     8                  Flag qualifiers that MCR should ignore.
     9
    10              V03-005 PCG0004             Peter George     27-Jun-1983
    11                  Add SPAWN/CLI.
    12
    13              V03-004 PCG0003             Peter George     21-Jun-1983
    14                  Add SPAWN/KEYPAD.
    15
    16              V03-003 PCG0002             Peter George     30-Apr-1983
    17                  Add SPAWN/PROMPT/CARRIAGE_CONTROL.
    18
    19              V03-002 PCA1008       Paul C. Anagnostopoulos 25-Mar-1983
    20                  Make all necessary changes for new CDU.
    21
    22              V03-001 PCG0001             Peter George     02-Feb-1983
    23                  Add SPAWN/SYMBOLS/LOGICAL_NAMES/NOTIFY/CONTINUE
    24                  Remove /TIME_LIMIT.
    25
    26
    27      define verb spawn
    28              cliroutine spawn
    29              prefix cli$k_spaw
    30              parameter p1,value(type=$rest_of_line)
    31              qualifier process,      value(required)
    32              qualifier wait,         default
    33              qualifier log,          default
    34              qualifier input,        value(required,type=$infile)
    35              qualifier output,       value(required,type=$outfile)
    36              qualifier symbols,      default,cliflags(mcrignore)
    37              qualifier logical_names,default
    38              qualifier notify
    39              qualifier carriage_control,cliflags(mcrignore)
    40              qualifier prompt,       value,cliflags(mcrignore)
    41              qualifier keypad,       default,cliflags(mcrignore)
    42              qualifier cli,          value(required,type=$file)
    43              qualifier table         value(required,type=$file)
    44
    45      define syntax attach_by_pid
    46              noparameters
    47
    48      define verb attach
    49              cliroutine attach
    50              prefix cli$k_atta_
    51              parameter p1,value(required),prompt="Process"
    52              qualifier identification, value(required),syntax=attach_by_pid
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !
 2  !  Version:     'V04-000'
 3  !
 4  !      V03-016 JAK0227         J A Krycka              17-Aug-1984
 5  !              Disallow certain printer queue specific qualifiers to be used
 6  !              with /BATCH and /GENERIC.
 7  !
 8  !      V03-009 JAK0226         J A Krycka      16-Aug-1984
 9  !              Change /OWNER to /OWNER_UIC for consistency with other commands.
10  !              Omit "list" as an attribute for the /OWNER_UIC qualifier.
11  !
12  !      V03-008 JAK0220         J A Krycka      12-Jul-1984
13  !              Add [NO]FEED option to the /DEFAULT qualifier.
14  !
15  !      V03-007 JAK0219         J A Krycka      11-Jul-1984
16  !              Add /BUFFER_COUNT and /EXTEND_QUANTITY qualifiers.
17  !
18  !      V03-006 MLJ0006         Martin L. Jack  29-Jul-1983
19  !              Add /LIBRARY and /SCHEDULE.
20  !
21  !      V03-005 MLJ0005         Martin L. Jack  27-May-1983
22  !              Changes for new QUEMAN image.
23  !
24  !      V03-004 MLJ0004         Martin L. Jack  27-Apr-1983
25  !              Changes for new QUEMAN image.
26  !
27  !      V03-003 MLJ0003         Martin L. Jack  01-Mar-1983
28  !              Changes for new QUEMAN image.
29  !
30  !      V03-002 PCA1008         Paul C. Anagnostopoulos 10 Feb 1983
31  !              Remove PREFIX clause.
32  !
33  !      V03-001 MLJ0001         Martin L. Jack  03-Jan-1982
34  !              Changes for new QUEMAN image.
35  !
36  define type print_bft
37      keyword all,default
38      keyword one
39
40  define type defaults
41      keyword burst,negatable,value(type=print_bft)
42      keyword feed,negatable
43      keyword flag,negatable,value(type=print_bft)
44      keyword trailer,negatable,value(type=print_bft)
45
46  define type retain
47      keyword all,default
48      keyword error
49
50  define type schedule
51      keyword size,negatable
52
53  define type separate
54      keyword burst,negatable
55      keyword flag,negatable
56      keyword reset,negatable,value(required,list)
```

```
 57           keyword trailer,negatable
 58
 59    define type protection
 60           keyword system,value
 61           keyword group,value
 62           keyword owner,value
 63           keyword world,value
 64
 65    define syntax start_cpu
 66           image mp
 67           noparameters
 68           noqualifiers
 69
 70    define syntax start_queue
 71           parameter p1,prompt="Queue",value(required)
 72
 73    define syntax start_queue_manager
 74           parameter p1,prompt="File",value(type=$infile)
 75
 76    define verb start
 77           image queman
 78           parameter p1,prompt="What",value(required)
 79           qualifier align,        value(list)
 80           qualifier backward,     value
 81           qualifier base_priority,value(required)
 82           qualifier batch
 83           qualifier block_limit,  value(required,list)
 84           qualifier buffer_count, value(required)
 85           qualifier characteristics,value(required,list)
 86           qualifier cpu,nonnegatable,syntax=start_cpu
 87           qualifier cpudefault,   value(required)
 88           qualifier cpumaximum,   value(required)
 89           qualifier default,      value(required,list,type=defaults)
 90           qualifier disable_swapping
 91           qualifier enable_generic
 92           qualifier extend_quantity,value(required)
 93           qualifier form,         value(required)
 94           qualifier forward,      value
 95           qualifier generic,      value(list)
 96           qualifier job_limit,    value(required)
 97           qualifier library,      value(required)
 98           qualifier manager,      syntax=start_queue_manager
 99           qualifier new_version
100           qualifier next
101           qualifier on,           value(type=$infile,required)
102           qualifier owner_uic,    value(required,type=$uic)
103           qualifier processor,    value(required)
104           qualifier protection,   value(required,list,type=protection)
105           qualifier queue,        syntax=start_queue
106           qualifier retain,       value(type=retain)
107           qualifier schedule,     value(required,list,type=schedule)
108           qualifier search,       value(required)
109           qualifier separate,     value(required,list,type=separate)
110           qualifier terminal
111           qualifier trailer
112           qualifier top_of_file
```

```
113          qualifier wsdefault,    value(required)
114          qualifier wsextent      value(required)
115          qualifier wsquota,      value(required)
116          disallow default and (batch or generic)
117          disallow separate and (batch or generic)
118          disallow form and (batch or generic)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1      Version:      'V04-000'
 2
 3          V03-009 JAK0220 J A Krycka                      22-Jul-1984
 4                  Eliminate the default attribute from the FEED qualifier
 5                  because there there is now a queue level default for it.
 6
 7
 8          V03-008 RRB0021 Rowland R. Bradley              19-Jun-1984
 9                  Add the common qualifier package to both PRINT and
10                  SUBMIT.  The qualifiers include /confirm, /exclude,
11                  /before, /since, /created, /modified, /expired, /backup,
12                  and /by_owner.  Disallow /REMOTE with other qualifiers than
13                  the common qualifier ones.
14
15          V03-007 PCG000c         Peter George            14-Feb-1984
16                  Add SUBMIT/PRINTER default.
17
18          V03-006 PCG0002         Peter George            15-Aug-1983
19                  Add SUBMIT/SNA qualifiers.
20
21          V03-005 MLJ0005         Martin L. Jack          26-May-1983
22                  Changes for new SUBMIT image.
23
24          V03-004 MLJ0004         Martin L. Jack          27-Apr-1983
25                  Changes for new SUBMIT image.
26
27          V03-003 MLJ0003         Martin L. Jack          01-Mar-1983
28                  Changes for new SUBMIT image.
29
30          V03-002 MLJ0002         Martin L. Jack          30-Dec-1982
31                  Changes for new SUBMIT image.
32
33          V03-001 PCG0001         Peter George            05-Sep-1982
34                  Add SUBMIT/SNA.
35
36 define type print_bft
37        keyword all,default
38        keyword one
39
40 define verb print
41        image submit
42        parameter p1,prompt="File",value(required,list,impcat,type=$infile)
43        qualifier after,          value(required,type=$datetime)
44        qualifier backup
45        qualifier before,         value(default=today,type=$datetime)
46        qualifier burst,          value(type=print_bft),placement=positional
47        qualifier by_owner,       value(type=$uic)
48        qualifier characteristics,value(required,list)
49        qualifier confirm
50        qualifier copies,         value(required),placement=positional
51        qualifier created
52        qualifier delete,         placement=positional
53        qualifier device,         value(required)
54        qualifier exclude,        value(required,list)
55        qualifier expired
56        qualifier feed,           placement=positional
```

```
57          qualifier flag,            value(type=print_bft),placement=positional
58          qualifier form,            value(required)
59          qualifier header,          placement=positional
60          qualifier hold
61          qualifier identify,        default
62          qualifier job_count,       value(required)
63          qualifier lowercase
64          qualifier modified
65          qualifier name,            value(required)
66          qualifier note,            value(required)
67          qualifier notify
68          qualifier operator,        value(required)
69          qualifier pages,           value(required,list),placement=positional
70          qualifier parameters,      value(required,list)
71          qualifier passall,         placement=positional
72          qualifier priority,        value(required)
73          qualifier queue,           value(required)
74          qualifier remote
75          qualifier restart
76          qualifier setup,           value(required,list),placement=positional
77          qualifier since,           value(default=today,type=$datetime)
78          qualifier space,           placement=positional
79          qualifier trailer,         value(type=print_bft),placement=positional
80          qualifier user,            value(required)
81          disallow                   remote and (user or trailer or space or
82                                     setup or restart or queue or
83                                     priority or passall or parameters or pages or
84                                     operator or notify or note or name
85                                     or lowercase or job_count or identify or hold
86                                     or header or form or flag or feed
87                                     or device or delete or after
88                                     or copies or characteristics or burst)
89
90  define type translate_keywords
91          keyword ebcdic,            default
92
93  define syntax submit_sna
94          image snasubmit
95
96  define verb submit
97          parameter p1,prompt='File',value(required,list,impcat,type=$infile)
98          qualifier after,           value(required,type=$datetime)
99          qualifier backup
100         qualifier before,          value(default=today,type=$datetime)
101         qualifier by_owner,        value(type=$uic)
102         qualifier characteristics,value(required,list)
103         qualifier cli,             value(required)
104         qualifier confirm
105         qualifier cputime,         value(required)
106         qualifier created
107         qualifier delete,          placement=positional
108         qualifier exclude,         value(required,list)
109         qualifier expired
110         qualifier hold
111         qualifier identify,        default
112         qualifier keep
```

```
 113          qualifier log_file,       value(required)
 114          qualifier modified
 115          qualifier name,           value(required)
 116          qualifier notify
 117          qualifier parameters,     value(required,list)
 118          qualifier printer,        value(default="SYS$PRINT")
 119          qualifier priority,       value(required)
 120          qualifier queue,          value(required)
 121          qualifier remote
 122          qualifier restart
 123          qualifier since,          value(default=today,type=$datetime)
 124          qualifier sna,            syntax=submit_sna                    ! SNA
 125          qualifier translate,      default,placement=positional,        ! SNA
 126                                    value(type=translate_keywords,default="EBCDIC")
 127          qualifier user,           value(required)
 128          qualifier wsdefault,      value(required)
 129          qualifier wsextent,       value(required)
 130          qualifier wsquota,        value(required)
 131          qualifier record_size,    nonnegatable,placement=positional,   ! SNA
 132                                    value(required)
 133          qualifier tab,            placement=positional                 ! SNA
 134          disallow                  remote and (tab or record_size or wsquota or
 135                                    wsdefault or user or translate or sna
 136                                    or restart or queue or priority or printer or
 137                                    parameters or notify or name or
 138                                    log_file or keep or identify or hold
 139                                    or delete or cputime or after or wsextent
 140                                    or cli or characteristics)
```

$ SET COMMAND SRCS:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !
 2  !  Version:    'V04-000'
 3  !
 4  !      V03-002 MLJ0002          Martin L. Jack          30-Dec-1982
 5  !                Changes for new QUEMAN image.
 6  !
 7  define verb synchronize
 8          image queman
 9          parameter p1,prompt="Jobname"
10          qualifier entry,          value(required)
11          qualifier queue,          value(required)
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !
 2  !  Version:    'V04-000'
 3  !
 4  !     V03-004  MCN0173         Maria del C. Nasr              09-Jul-1984
 5  !             Let /OUTPUT qualifier default to SYS$OUTPUT.
 6  !
 7  !     V03-003  SHZ0003         Stephen H. Zalewski            16-Feb-1984
 8  !             Disallow /OUTPUT and /PAGE.
 9  !
10  !     V03-002  SHZ0002         Stephen H. Zalewski            12-Mar-1983
11  !             Changed /BYOWNER qualifier to /BY_OWNER.
12  !
13  !     V03-001  SHZ0001         Stephen H. Zalewski            10-mar-1983
14  !             Add common qualifer package to TYPE.  Modified TYPE to use
15  !             new CLD.
16  !
17  define verb type
18          image type
19          parameter p1,prompt="File",value(required,list,impcat,type=$infile), label=input
20          qualifier backup
21          qualifier before,       value(default=today,type=$datetime)
22          qualifier confirm
23          qualifier created
24          qualifier exclude,      value(required,list)
25          qualifier expired
26          qualifier modified
27          qualifier on,           value(default=today,type=$datetime)     ! not yet implemented
28          qualifier output,       default,value(type=$file,default="SYS$OUTPUT")
29          qualifier page,
30          qualifier since,        value(default=today,type=$datetime)
31          qualifier by_owner,     value(type=$uic)
32
33          disallow  output and page
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

```
 1  !
 2  !  Version:    'V04-000'
 3  !
 4  !  Edit History
 5  !
 6  !      V03-001 AEW0001         Anne E. Warner              09-Nov-1983
 7  !              PREFIX clause removed.
 8  !
 9  define verb unlock
10          image unlock
11          parameter p1,prompt="File",value(required,list,impcat,type=$infile)
12          qualifier confirm
13          qualifier log
```

$ SET COMMAND SRC$:ACC.CLD,ANALYZE.CLD,BACKUP.CLD,CHECKSUM.CLD,CONVERT.CLD,COPY.CLD,CREATE.CLD,DCLINT.CLD,DELETE.CLD,DIFF.CLD,DIRECT

SHOW
CLD

SPAWN
CLD

UFD
CLD

START
CLD

UNLOCK
CLD

DCLTABLE2
LIS

DCLTABLE1
LIS

SUBMIT
CLD

MCRTABLES
LIS

SORT
CLD

SYNCH
CLD

TYPE
CLD